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Famous Composers and their Works

New Series

Edited by Louis C. Elson

Illustrated

Vol. II.

DMB.

Boston

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WIDOR.

MUSICAL FORMS

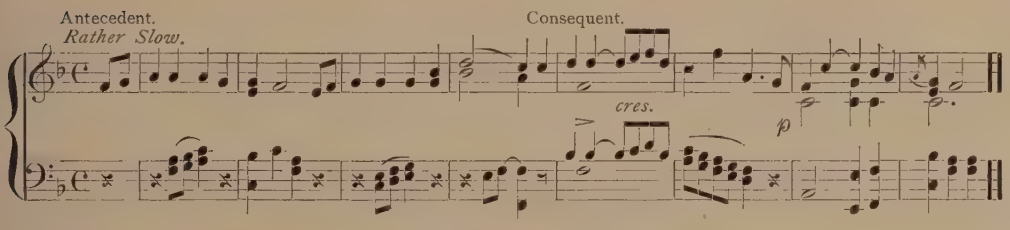
MUSICAL FORMS

CHAPTER I.

SONG FORMS.

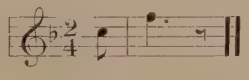
WHEN Schlegel, the German poet, said to Madame De Staël, — "Architecture is frozen music," he voiced a truth which can be taken from the musical as well as from the architectural side; for music in its classic forms is as definite in architecture as a Gothic cathedral or a Moorish minaret. In its simplest forms the structure of music is closely akin to that of poetry, since the musical period resembles the stanza in poetry, the musical phrase is much like the line of poetry, and the figure is not vastly different from the poetic foot; but the figure is also used in music in a manner which finds no parallel whatever in poetry. The smallest independent form used in music is a single period, a complete musical sentence. This form is frequently used in the old ballads ("Sir Patrick Spens," the old Scottish ballad, is a good example), but rarely appears as an instrumental work. The accompanying musical selection will illustrate the period.

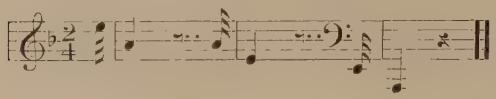
No. 1. OLD ENGLISH MELODY

Example of single-period form.

In the printing of poetry the balance of lines is shown clearly to the eye. This is not deemed necessary in music, nor could it be effectually employed in any save the simplest forms, yet in these forms music rhymes as definitely as poetry. To illustrate this, see Music Volume ***, page 172, in which the rhyming structure of the music is made apparent.

The chief laws of musical form are contrast and symmetry; in fact, musical form is only contrast reduced to law.

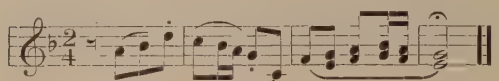
A single period makes a poor musical structure, since the laws of contrast cannot be clearly portrayed.

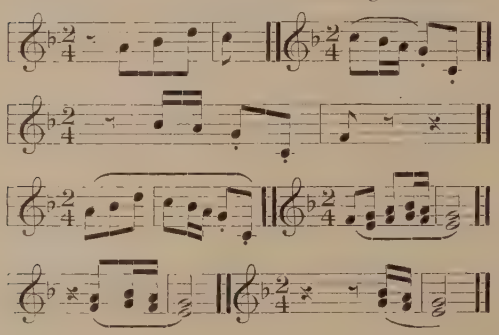
The smallest recognizable musical thought is found in the figure. A musical figure must possess rhythm, and it should also possess tonality. The figure is often used by the composer as a seed from which is grown a harvest of musical thoughts. The shortest figure possible would be two notes merely. In the following figure of two

notes both rhythm and tonality are indicated. Beethoven, in the first movement of his Ninth

Symphony, has used a two-noted figure, which is rhythmic, but not of definite tonality or key.

From such a figure an entire melody could readily be evolved.

The first movement of Beethoven's Fifth Symphony is almost entirely derived from a figure of four notes.

Sometimes several of these figures are brought together in a single phrase of music.

Beethoven, in the beginning of his Sixth Symphony, presents a musical phrase,

which can be subdivided into seven figures, thus



and then derives almost the entire first movement from combinations of these figures; thus the germs of the movement are found in its first four measures. It is generally in the first measure of a developed musical composition that we find the figure which is to form the chief thought of the work.

Sometimes a special meaning is attached to the figure; it may be made to represent some person or thing or event; it is then a *leitmotif*, or *guiding figure*, such as we find in the works of Wagner. Since the guiding figure is used as a clue to the action of the opera or work in which it occurs, it is not developed so freely as the figures given above. As transposition is the simplest mode of treating a figure, the guiding motive is chiefly developed in this fashion with constant changes of harmony. By means of a guiding figure Wagner causes his accompaniment in opera to speak a definite language, as clear and intelligible as French or Italian.

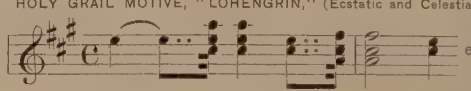
By introducing the guiding figure when he desires to call our attention to some incident or object, Wagner causes the orchestra to assume very much the rôle of a chorus in the old Greek tragedies, which explains the motives, actions, hopes, and fears of the characters, to the audience.

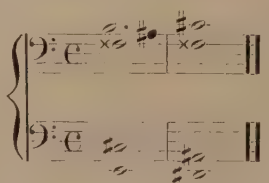
The guiding motive is not merely a labeling of this or that character. The warning motive in "Lohengrin," for example, thundered forth when Ortrud whispers to Elsa as she enters the cathedral for her marriage, gives a definite clue as to what it is that Ortrud has said; the love motive as Siegmund attempts to leave Sieglinde, in the first act of the "Walküre," fearing lest he involve her in his own misfortune, tells a story of his thoughts that could not otherwise be as clearly expressed to the audience.

Yet we must not imagine Wagner to have been the inventor of the guiding motive. We find, at least, one in Mozart's "Don Giovanni," and other old composers have used a similar device, but none of the predecessors of Wagner ever dreamed of using it as copiously as he has done. By means of the guiding motive a new intellectuality has been imparted to modern music.

Where the guiding motive is more freely treated than by transposition, it has been developed to some purpose, as in the fierce presentation of the "Parsifal" motive, when that hero views the suffering king, or in the fragmentary presentation of the spear motive as Wotan's weapon is shattered by the young Siegfried.

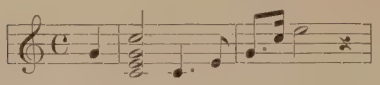
The guiding motive is the best possible example of condensation of musical thought. It must necessarily be characteristic of the object it portrays. We give a few examples of the Wagnerian guiding figure.

HOLY GRAIL MOTIVE, "LOHENGRIN," (Ecstatic and Celestial).

FATE MOTIVE IN "WALKÜRE," "SIEGFRIED," Etc., (Foreboding).

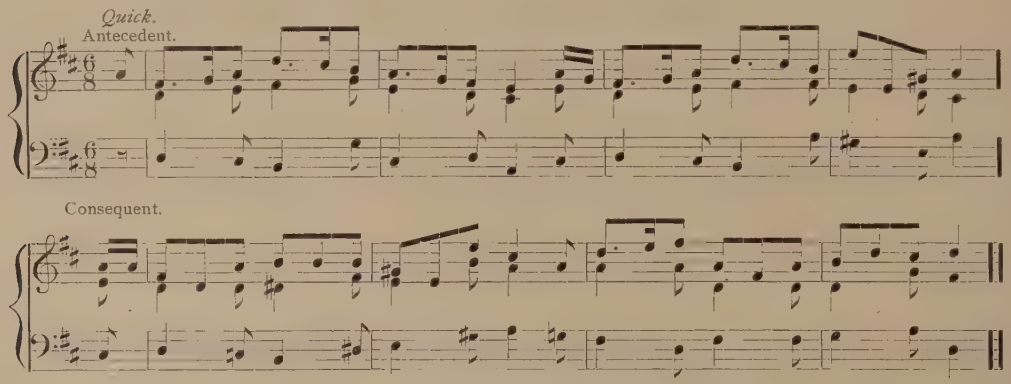


SIEGLINDE AND SIEGMUND—WAGNER'S WALKÜRE.

From original drawing by M. Fantin-Latour.

SWORD MOTIVE IN THE SAME OPERAS. (Martial.)

The orchestral scoring of such figures adds greatly to their effect; the "Holy Grail" figure is sighed out by violins and flutes in high register; the "Fate" motive is generally given by the deepest wind instruments; the "Sword" motive most frequently appears on the trumpet.

We have alluded to the period as a complete musical sentence. It most generally consists of two phrases, the first called antecedent, the second, consequent. The antecedent is in the nature of a proposition or question; the consequent in the nature of fulfilment or answer.



The antecedent, generally representing unrest, most usually does not end with a full cadence; the consequent is required to bring in the element of repose and completion. Sometimes, however, the antecedent may lead to a full cadence (as for example, in Mendelssohn's "Songs Without Words," No. 9, — often called "Consolation"); but even in such a case one will readily sense the incompleteness of the thought until the consequent is balanced against it.

The consequent is sometimes evolved from the antecedent phrase by mere repetition, more frequently by some change of treatment of the antecedent (inversion, variation, etc.), and sometimes it stands in absolute contrast to the initial phrase, not being derived from it in any way.

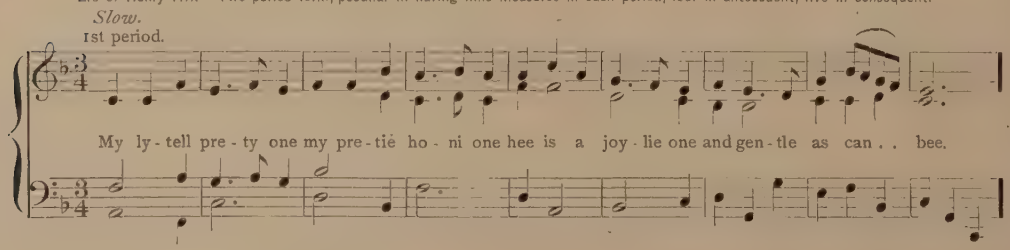
At times each of these phrases seems to divide palpably; such a division (generally two measures in length) is frequently called a "section," although this word is applied in so many different ways that "semi-phrase" would seem to be a more definite name.

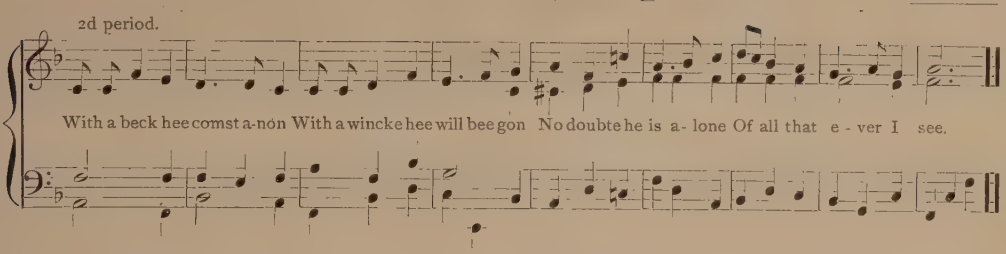
The matter of nomenclature in Musical Form will never be unified. Each teacher seems to take delight in inventing new names, some of which only serve to puzzle the pupil. The forms of two and three periods, which follow, have, for example, been called, "two-part song-forms," and "three-part song-forms," a nomenclature which too often sends the student to Bach's "Two-part Inventions" and "Three-part Inventions," for good examples, quite unaware of the fact that Bach, by the word "part," means not "division," but "voice."

The next larger form is a double period. This bipartite structure is produced by placing two complete periods in contrast with each other as illustrated below.

SONG.

Era of Henry VIII. Two-period form, peculiar in having nine measures in each period, four in antecedent, five in consequent.





One of the distinguishing characteristics of simple music, and of fairly developed classical instrumental music, is that its ending resembles its beginning. It might be roughly compared to a *sandwich* in tones. Sometimes this three-fold effect can be produced in a composition containing but two periods by causing the last phrase (consequent) of the second period to be derived from the first phrase (antecedent) of the first period. (See Music Volume ***, page 178.)

The general presentation of the three-fold form is, however, somewhat more developed. It consists of a period, and this first period may end either in its own key or in some key nearly related to its tonic. This division may be repeated if the composer desires. There may now follow a second period, clearly formed of antecedent and consequent, as the central division. This would be called a counter-theme. Or a free modulatory and less melodic passage might occur, in contrast with the tuneful character of the first period. This latter would generally be without a full cadence, and lead directly into the next division. It is called an "episode." Division 3 would be a return of division 1, either with or without variation, ending in the tonic key. A schedule of this three-division form might be given as follows:

Division 1. — Theme, ending either in tonic or in a related key,

Division 2. — Episode: — modulatory.

Division 3. — Theme, with its consequent altered (if necessary) to end in the tonic key.

In the treatment of antecedent and consequent of the themes in this form, the antecedent is generally given with more formality and strictness than the consequent. It would generally be four or eight measures long. The consequent, while generally of the same length, might be extended to greater proportions in the return of theme in the third division. The antecedent would generally be a clear reproduction of the antecedent of the first division, the consequent might be extended, varied, and altogether more freely treated. Numerous examples of such free treatment of consequent can be found in Mendelssohn's "Songs Without Words." (Also see Music Volume ***, page 182.)

The above forms are generally called *song-forms*, since their chief application is in vocal music; none-the-less there are many instrumental works which present exactly the same features.

The comprehension of these divisions and their relationship to each other is essential to the player in musical phrasing, which is practically the punctuation of music. A misapprehension, for example, of the figure and its treatment, of the exact length of an antecedent, or of the point of beginning of the consequent phrase, might lead to an utter distortion of the interpretation of the music. In the scherzo of Beethoven's Ninth Symphony, for example, there are two passages, both marked in precisely the same rhythm, 3—4 which must be played in a totally dissimilar manner, the first being grouped in bunches of three measures, the second, four measures each. The result of the lack of comprehension of such phrasing often leads to deplorable results in musical interpretation. A reader reciting a stanza from Gray's "Elegy," thus —

> The curfew tolls;
> The knell of parting day, the lowing;
> Herd wind slowly.
> O'er the lea the ploughman;
> Homeward plods his weary way and leaves the world
> To darkness and to me.

would be ridiculous; but such errors take place far more frequently in music than is deemed possible, through a lack of comprehension of the symmetrical divisions and their relationionship.

The formal character of the three-division style spoken of above has frequently been attacked by those extreme moderns who follow the Wagnerian lead in their attacks on form. They consider the return of the first thought at the end of the composition to be too formal to admit of variety; nevertheless, the variety attainable in the simple form

of three divisions (often called the tripartite song form), is as infinite as that of the leaves in the forest. One might as well consider the human face monotonous because the eyes, mouth, and nose always occupy the same relative position!

The return of the first period at the end of the form is sometimes abbreviated, sometimes extended, and very often varied in some of its details. If repetition is made in this simple form, the first period or theme is repeated alone, the episode and return of theme are repeated together.

Sometimes this form is too short to give sufficiency of contrast; in this case a larger form, derived from it, can be used. This larger form is the so-called *minuet-form*. It received this name because the old minuets were generally given in this shape. It is sometimes also entitled the "Song-form with trio," or the "Applied Song-form." This is still a form of three divisions, making a larger sandwich than the one above described. Its three-fold character is obtained by placing two song-forms in contrast with each other, thus:

Division 1. — First song-form.
Division 2. — Another song-form, called trio.
Division 3. — First song-form, as in Division I.

Almost all drawing-room music, from the trashiest works of the cheapest composers, up to the Polonaises of Chopin, is written in this form. Its chief fault is its repetition; in fact, this drawback may be acknowledged in the last two forms described. The general tendency of the musical world at present is to avoid repetition. Critics of the above forms have attacked them by saying that the repetitions demanded in such music would not be tolerated for an instant in poetry. This is quite true; but music is less intelligible than poetry at the first hearing, and bears repetition much more readily.

The minuet form in its separate divisions may be explained as follows:

Division 1. — A full song-form, either in two periods or three periods, as described above.

Division 2. — A second song-form, in either of the above shapes, but generally lyrical and gentle in character. This is most frequently in the key of subdominant. It is called the "trio" because, when used in the old minuet forms in the last century, the first minuet was played by a full orchestra, or by the strings, but the second minuet was generally played by the wood-wind in three-part harmony. One can discern this three-part harmony in many of the trios in the Bach Gavottes and other old dances. To-day, although called "trio," it is by no means necessary that it should appear in three-part harmony. It is not always marked with the title of "trio," although generally this is the case.

Division 3. — A return of the entire first song-form. Sometimes this return is literal and exact. It is not considered necessary even always to print it; frequently a "Da Capo" indicates a return of the first division. If written out in full, some changes and variations can be made, but it most frequently appears unchanged. This form will be found in the minuets of any of the Haydn or Mozart Symphonies.

Sometimes only the chief theme of the first song-form returns. This is an "abbreviated minuet-form," and is occasionally found in drawing-room music.

There is generally but little figure development in the forms above described. If the minuet appears in symphony or sonata it is generally not only the above form, but almost always in 3—4 rhythm. We give two examples of the song-form with trio in our musical selections. (See Music Volume ***, page 183, 187.)

In spite of the amount of repetition used in the minuet form, Beethoven extended it in his Fourth Symphony. In this he used a minuet form as follows:

First. — Minuet.
Second. — Trio.
Third. — Minuet.
Fourth. — Trio again.
Fifth. — Part of the minuet.

He also used a form akin to this in the Scherzo of his Seventh Symphony, and in one of his string quartets. The avoidance of the repetition inseparable from such a form caused Schumann to invent a song-form with two different trios. This might briefly be scheduled thus:

Division 1. — First song-form.
Division 2. — First trio.
Division 3. — Song-form again.
Division 4. — Second trio.
Division 5. — Song-form once more, or part of it.

The time-honored Wedding-march by Mendelssohn is an example of such song-form with the double trio. (See Music Volume ***, page 193.) Its divisions may be scheduled as follows:

Division 1. — A march (or song-form) consisting of three periods, in the third-division song-form described above.

Division 2. — The first trio, of two periods (also described in the forms above).

Division 3. — The chief theme of the march-form.

Division 4. — The second trio of two periods, followed by a long returning passage, leading into —

Division 5. — The march-form (final appearance).

All this is followed by a coda.

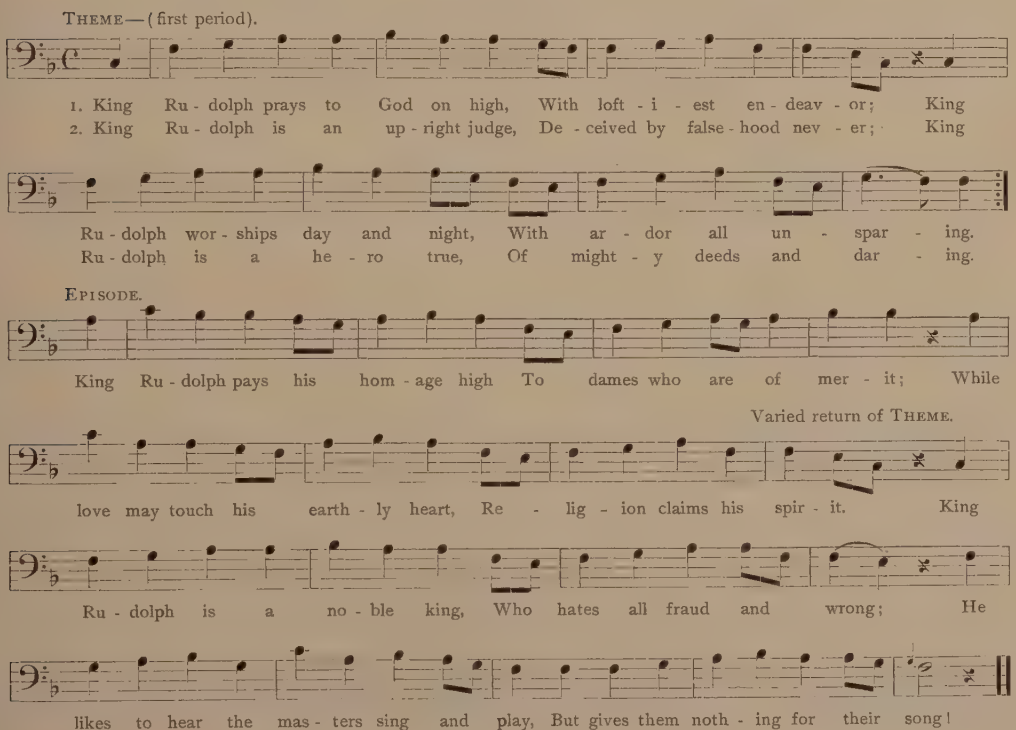
A coda may be added to any musical form after its completion. The word itself, "coda," derived from "cauda," a tail, explains its relationship to the form. It comes in the nature of a postscript. Naturally the postscript is never written until the letter is completed, and its size should be less than the body of the letter.

CHAPTER II.

THE CYCLE FORMS. THE OLD DANCES. THE SUITE.

In tracing the genealogy of music, one finds that many of our classical forms are derived from the dance. Even the symphony can be traced back in some of its elements to the placing of different dances in juxtaposition, in ancient days. Dancing is, therefore, in a sense, the mother of musical form. In the Middle Ages the dances were broadly divided into two kinds: those of the aristocracy were slow and stately; those of the peasantry were generally quick and hearty. One of the earliest presentations of musical form was made by placing these two dances, the quick and the slow, in contrast with each other. This was the first step, and improvement was bound to follow; and the return of the first dance after the slow dance rounded out the form. We give an example (see Music Volume ***, page 198), of the two dances thus placed. As early as the year 1287 something akin to this is found in the Songs of the Troubadours and Minne-Singers. The song given in the musical example below was sung before Rudolph of Hapsburg in that year. It contains some of the elements of the musical sandwich described in the preceding chapter.

MINNE-SONG.

Sung to Rudolph of Hapsburg, A.D. 1287. Illustrating the early use of a rudimentary three-division form.

CARMENCITA.

Reproduced from original painting by John S. Sargent.

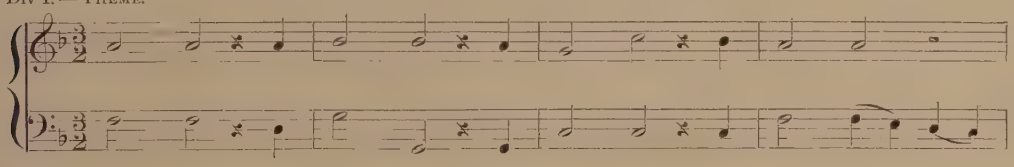
As the dances of the fifteenth, sixteenth, and seventeenth centuries were frequently used in the old cycle forms, it is proper that these should now be examined with some degree of detail.

The Chaconne was a dance which probably came from Spain, although it was much used in the Italian and French musical forms. It was most frequently in triple rhythm, slow, and generally in a major key. Some few Chaconnes were written in 2—4 or 4—4 rhythm, but these were exceptional. As the French ballet composers in the seventeenth century used the Chaconne as a grand finale for their compositions, they quickened its tempo, and made it altogether more elaborate. Bach's Chaconne for violin is one of the most prominent examples of this dance in classical music.

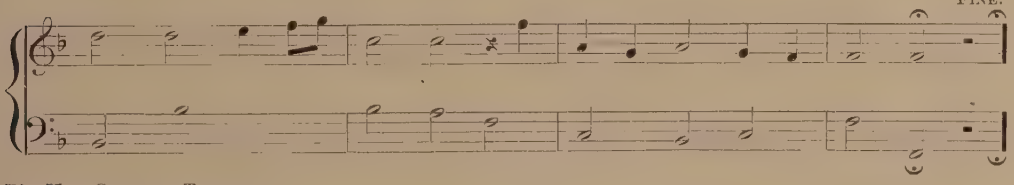
The Sarabande. This was one of the slow dances which was long a favorite in ancient Spain. It probably had its origin when the Moors were in possession of the southern part of that country. It may be noted in this connection that the Arabic music has percolated through Spanish sources into the European musical forms, and that some of our instrumental shapes can be traced to their inception in the Moorish dances. The Turkish dance Ser-a-Bende, still in use, tends to prove the origin of the Sarabande. The Spaniards made of it a religious dance, and it was frequently danced in the cathedral of Seville on Holy Thursday by the altar boys. The dignity of its religious origin is still found in the Sarabandes of Bach. This dance became the central movement of the old cycle form known as the suite. The rhythm of the Sarabande is triple, its tempo very slow, and it is the stateliest of all the old dances. One characteristic of the Sarabande is a slight syncopation of the second beat of the measure. Händel has left to the world a famous Sarabande which he composed for his first German opera (in Hamburg) entitled "Almira." On his advent in England, finding that Sarabandes and slow dances were not in great favor, he turned his own melody from a dance into a song which is now known as "Lascia ch' io pianga." We give this Sarabande in its original state, as a very clear example of the song-form of three divisions.

SARABANDE.

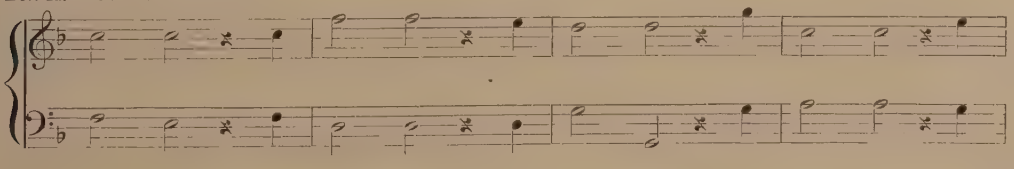
Div I. — THEME. From Händel's Opera, "Almira" (afterwards changed into a song). Three-division form.



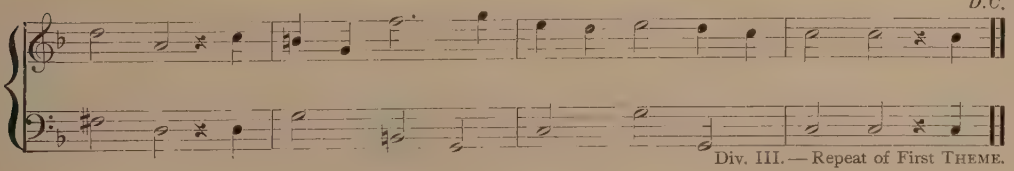
FINE.



Div. II. — COUNTER THEME.



D.C.



Div. III. — Repeat of First THEME.

The Courante derived its name from the French *courir* (to run). It was a rapid running movement in triple rhythm.

The Gaillard was usually in 3—4 or 4—4 rhythm, a merry dance with a strong rhythm, a favorite in England as well as in France, and alluded to more than once by Shakespeare.

The Passacaglia was another Spanish dance very much akin to the Chaconne, but generally minor. It was not vastly different from the Sarabande; but while this latter was stately, the Passacaglia was bombastic and grandiloquent. It was of very slow tempo and in triple rhythm. Originally it seems to have been a Spanish court dance, rather a posturing than a capering one. One or two of the Spanish grandees in full court costume, velvet mantle, plumed hat, high boots, spurs, etc., would walk through its measures, and strike attitudes to the strongly accented music. Bach has used the Passacaglia prominently, and Brahms has introduced it as the finale of his Fourth Symphony. The origin of the word is probably to be sought, not in the Spanish *pasar calle* (going along the streets), but in *Passo Gallo* (the step of a rooster).

The Minuet.— No dance has exerted so strong an influence upon music as the minuet. Through its contrasts in the ancient music the "song-form with trio" (described in the preceding chapter) was evolved, and it was the only dance regularly admitted into the Symphony, by Haydn. Triple in rhythm and slow in tempo, the minuet was the most elegant of dances. When used purely as an instrumental form (without dancing) the speed of the minuet was somewhat increased, therefore *tempo di minuetto* has come to mean something distinctly quicker than the old dance, and is generally an allegretto. It may be passingly mentioned that the minuet as a dance gave rise to the modern waltz. The transition to the modern dance can be readily observed in the minuets of Schubert.

The Passepieds was also in triple rhythm, and might be compared to a very rapid and somewhat vigorous minuet. It generally began on the last beat of its triple rhythm, and was strongly accented. Not only did Bach employ this dance in some of his forms, but it was once a great favorite in England, and was even danced at the Elizabethan Court.

The Hornpipe is not included in classical dances by moderns, yet it once occupied a much higher estate than at present. Händel has written the hornpipe in some of his orchestral compositions, and even Bach introduces it in a piano work under the title of "Anglaise." It was in triple, sometimes in even rhythm, and of rapid tempo with strong accents. It took its name from an old English shepherd's pipe (specimens of which are still preserved in the South Kensington Museum), and it was the favorite rustic dance of England in mediæval times.

The Gavotte. — This dance was the favorite recreation of the citizens of the town of Gap in France, who were called Gavots. It soon came into social acceptance, and was frequently danced in Paris. It now became much more elegant and less hearty in its rhythm. It is about *allegretto* in tempo, and of a skipping style in 4—4 rhythm. The character of the Gavotte is daintiness and geniality; as a dance it began on the third beat, which caused a light syncopation. Many concert Gavottes increased the true speed of the dance greatly.

Many of the Gavottes, as well as other of the old dances, have a contrasted movement joined to them which is called a "musette." The musette was a small bagpipe; and this name applied to the trio of any dance would signify that the bagpipe effect was to be imitated. In all of these musettes we find the drone bass of the old instrument introduced.

The Bourrée. — This was a rustic dance similar to the gavotte, but quicker and brighter. It was in quadruple rhythm, generally beginning on the fourth beat. It probably had its origin in Auvergne. Bach has employed the Bourrée with much effect.

The Pavane was slow and stately, in quadruple rhythm. It was among the 4—4 rhythms what the Sarabande was among triple, — the stateliest and most dignified. The name is derived from *pavana*, a peacock, which seems to indicate the splendor of costume and dignity of step which were associated with this dance; and allusions to it in Shakespeare's "Twelfth Night" show that it lost none of its slowness when employed in England.

The Rigaudon was one of the few aristocratic dances in rapid tempo; it was invented by M. Rigaud, a dancing-master of the court of Louis XIII. It was a jovial and animated 4—4 rhythm, and was frequently sung as well as danced. This vocal adjunct was a characteristic of many of the old dances; a combination which must have been a very pleasing one.

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The Allemande. — A cheerful dance in even rhythm. It is difficult to ascertain the origin of this dance. We find it called the "Allmayn" in some of the Elizabethan literature; and we find it as the first movement of each of Bach's suites, but the history of the dance has not been discovered.

The Gigue. — This is absolutely the same as the "jig," so popular in England and Ireland in recent times. It was the most widely disseminated dance of them all, being used by the peasantry in almost every country in Europe; yet its origin was probably German, since the word is derived from *Geige* (a fiddle), the instrument on which it was originally played. The Gigue is in a rhythm composed of groups of three, therefore 6—8 and 12—8 are its most usual markings, although 3—4 is not impossible. It was the heartiest of all the dances. Bach and the old composers ended their suites with this rollicking dance movement, believing that a cycle form (a set of contrasted movements) should end merrily. Their ending the suite with a jig is reflected in the Haydn's Symphonies, where the final movement almost always has a rollicking, cheerful character.

Almost any of these dances when used in the suite might be varied; the variation being called "a double." Out of these dances there grew a larger form. It was very soon discovered that the contrasts afforded by their various styles made a telling musical effect; and the composers were not slow to avail themselves of this. Cycle forms, therefore, soon arose.

The cycle form may be defined as a large composition made out of smaller complete numbers; thus the suite, the concerto, string quartette, symphony, etc., are cycle forms. The earliest of these were called "Partitas," and were not very definite in succession of their movements; but Bach gave to his suites a regular succession as follows: Allemande, Courante, Sarabande, Intermezzi, and Gigue. The full name given such a cycle was "Suite de danses;" but other freer suites, "Suite de pièces," were also used. Probably there was no form better suited to short and direct displays of counterpoint than the Suite. Its contrasts were effective, the Allemande being cheerful and bright, the Courante rapid, the Sarabande slow, the Gigue rollicking.

The Intermezzi were dances or movements left free to the composer, and might be chosen from any of the above-described dances. Even other movements, such as the "air" or "melody," the "caprice" or the "burlesca," were allowed. One defect of the old suite is that these numbers, although contrasted, were all in the same key, a succession which we do not follow in modern cycle forms. Bach has been accused of formality because of this clinging to a single key, yet the probability is that he was led to this by the exigences of the instruments; for the clavichord, harpsichord and spinet were generally tuned at this time in such a manner that much modulation was impossible, and the lute could not change from key to key without the performer pausing to retune his instrument at each modulation. In choosing the Intermezzi the composer generally took care to avoid very rapid movements for fear of spoiling the effect of the Gigue, and very slow movements because of the slowness of his Sarabande. Thus, confined to moderate tempi, he generally chose Gavottes or Minuets for these intermediate movements.

It is noticeable, not only in the suites, but in all of Bach's compositions, that where a number is in a minor key the final cadence generally turns to major. This was in accordance with a mistaken view of that epoch that the minor cadence was imperfect and rarely to be employed as close.

To many of these suites there were attached introductions, with the various names of prelude, intrada, preambule, sinfonia, fantasie, overture, toccata, etc. A few of these demand explanation. Intrada was most frequently a march movement; the fantasie, capricious; and the toccata generally of technical difficulty. At this epoch the word "symphony" ("sinfonia") was not employed as at present, but indicated a prelude, postlude, or interlude; thus the pastoral symphony in Händel's "Messiah" is merely a shepherd's interlude.

The suite was the first definite cycle form, and from this came the idea of that nobler modern cycle, the symphony and sonata.

CHAPTER III.

THE SONATA.

ALTHOUGH as a whole the sonata may be derived from the suite, there were other influences which moulded the form. The word "sonata" itself was an indefinite one; it came from the Italian *suonare*, to sound. In olden days an instrument was not spoken of as being "played," but "sounded;" and, therefore, a "sounding-piece"

LE-PAS-DE-QUATRE.

Reproduced from a painting by E. L. Garrido.

meant simply an instrumental selection. The earliest application of the word "sonata" is found in the works of Frescobaldi. He applies it to a single movement, and other composers apply it to very varying forms; yet, while these old sonatas seem subject to no definite law or form, they all recognize the necessity of contrast between the movements of their cycle form.

The sonatas of Henry Purcell (1658–1695) are examples of an earnest musician striving to attain a form which would unite the best possible contrast. His twelve violin sonatas have two, three, and four movements each; and the gem of the set, the so-called "Golden Sonata," has five distinct movements, all save one in the key of F, and the excepted one in D minor. Such sonatas were very much like suites. Corelli (1653–1713) has been regarded as the father of the sonata, but he was scarcely greater in this respect than Purcell. Among other of the old sonata composers we may mention Lully, Cesti, the two Scarlattis, Kuhnau, Mattheson, Buononcini, the Bachs, Händel, Schubert, Alberti, Galuppi, Paradisi, and Wagenseil.

Domenico Scarlatti made an advance upon the suite. He wrote more than sixty sonatas, and these foreshadow some of the effects of the modern works. Corelli made the first movement of his sonatas into a very important musical form, which might be stated as follows:

First. Themes.
Second. Their development.
Third. Return of themes.

It will be noticed that this form is still a three-division form, as described in Chapter I., but it is larger, and admits of much greater contrast; for the themes, of which there are generally two, could be in contrast with each other, they could deviate from the tonic in their first presentation, they could return to the tonic after the development. Again, this form presented a contrast between a strict and free treatment; for the themes might be melodic, while the development could be more contrapuntal and dramatic. This first movement of Corelli in the old sonatas afterwards became in a more developed state the best movement in the classical sonata or symphony, the so-called "sonata allegro."

Probably among the composers who preceded the establishment of the classical sonata, Philipp Emanuel Bach was the greatest, and exerted the chief influence upon the sonata before Haydn. While the works of his father, John Sebastian Bach, still belonged to the free and contrapuntal sonatas, those of the son came very close to the form which Haydn composed.

It will be noticed, therefore, that there are two chief schools of sonatas: the old pre-Haydnite form was vague and variable; the classical, founded by Haydn, was definite and precise. To these may be added a third school, — a modern free sonata, such as Liszt and Schumann sometimes employed, — in which the shape is again vague, but the interest sustained by continuous development. Among the old sonata composers the early masters wrote in two movements; but three movements were very soon established, Kuhnau being the first to regularly use this form; Philipp Emanuel Bach also used the same form. In P. E. Bach's sonatas we find a contrast of themes and a brilliancy in modulation, but not that development and care of relationship which Haydn subsequently established.

It is almost impossible to unearth the real originator of the form of the old sonata. We find composers through nearly a century and a half making efforts to establish some form which should go beyond the suite, should be more effective in contrast, less limited to dance effects, which should be the best form for instrumental music. Occasionally they approached the classical style, but rather by accident than with a knowledge of the path; thus in some of the old works of Kozeluch we find certain sonatas almost exactly in the classical sonata form, and others again receding from it. John Sebastian Bach turns chiefly to the contrapuntal character in his sonata, and the influence of the fugue is very clearly noticeable. Philipp Emanuel Bach becomes more harmonic in structure, and is the one most modern in style in the entire group of the old sonata composers. Research among the old compositions and commentators proves almost unavailing. One finds only a series of hostile and contradictory statements. Purcell is accused of copying Corelli; Scarlatti is credited by some with being the true founder of the sonata; another gives to Philipp Emanuel Bach the entire honor of being the sonata founder; and the partisans of a dozen others each put forward the same claim; but from these conflicting statements one fact can be deduced: — there was a persistent effort toward a new form.

There was discontent with the old suite; the monotony of key, the constant dance effect, was to be abolished, the number of movements was to be abbreviated. Finally we find three movements

settled on as the appropriate number, of which the first was to be rapid, the second slow, the third again of quick speed; the first movement was to be in the form (themes and development) indicated above; and this was all that had been conclusively established when the founder of the classical sonata appeared upon the scene. To Franz Joseph Haydn belongs the credit of establishing this form; Mozart improved it; Beethoven perfected it.

The new form was accepted with avidity. The world had been waiting for a development of this kind in instrumental music. It took but sixty-five years from the planting of the seed for the harvest to reach its largest proportions. In 1759 Haydn composed his first classical sonata; in 1824 Beethoven composed the Ninth Symphony, the largest sonata form in existence.

Haydn gave to the full sonata form four movements, but used this form only in his larger instrumental works, as string quartets or symphonies. His piano sonatas were not so ambitious. The piano was still in an imperfect state, while the string quartet and orchestra were very nearly what they are to-day. Small wonder that the composer did not care to use the full sonata shape in his piano compositions; though Haydn wrote thirty-four sonatas for the piano, the sonata shape was only fixed definitely in his orchestral forms. Yet the value of the form of his piano sonatas is variable; and it is curious to note that while Beethoven in his earliest sonatas shows the influence of Haydn, Haydn, in his latest sonatas, distinctly follows Beethoven. The latest piano sonatas of Haydn are therefore much his best.

The character of the four movements which form the full sonata may be defined as follows: The first is generally the intellectual movement, which relies for its chief effect upon development of themes. Its tempo is rapid.

The second movement, if the regular order is preserved, is of slow tempo, *andante* or *adagio*. This is the emotional movement. Here melody and expression rule, rather than the ingenuity and skill of the first movement. It is generally in some related key to that of the tonic key of the composition.

The third movement, the scherzo, or minuet, is the playful and popular one. Haydn used the minuet in this movement, giving it a dainty and graceful style, generally making the tempo quicker than that of the dance minuet. Beethoven introduced a freer playful movement called the scherzo, in which the formality of the minuet was entirely abolished. This movement is the one in which composers most freely introduce their national music. Folk-songs and dances may appear; and this is one of the charms of modern symphony, — Tschaikowsky introducing Russian folk-dances in his symphonies, Grieg bringing Norwegian tunes into his sonatas, Dvorák using the melodies of his native Bohemia in his orchestral works, — the composers thus imparting a new life-blood into classical music by intertwining it with national melody.

Sometimes, if a better contrast can be obtained, the slow movement may come third, the playful movement second, as in Beethoven's Ninth Symphony.

The finale is generally a brilliant and bravura movement. In this finale we find much of the influence of the suite. Just as the gigue ended the whole cycle form with rollick and geniality, so we find the finale of Haydn and Mozart ending the symphony in a jocund manner. It was not the highest ideal, — this attempt to please the auditor at the end of a long form, — and we find Beethoven very soon discarding it. The finale of Beethoven's First Symphony, for example, is one of the most cheerful of movements; but already in his Second Symphony we find a resolute and more determined style taking the place of mere jollity, while in the later symphonies an advance toward grandeur is made. Of these changes we shall speak more at length in the examination of each especial movement which is to follow. Naturally, few composers have been able to achieve such a versatile expression as is demanded by the four movements described. Beethoven was the only master who was able to present intellect and emotion in perfect equipoise. He alone was able to achieve the complexity of the first movement, the romance of the second, the geniality of the third, and the climax of the fourth, with proper balance. Brahms was most at ease in the first movement, Chopin in the second, Mendelssohn in the third, and Berlioz in the scintillation of the finale. Up to the present time there is no better series of contrasts possible in instrumental music than is afforded by the juxtaposition of four such dissimilar movements, which become the perfect ideal of variety in unity. There are many great names in the field of sonata composition; but four will probably always stand preëminent, — Beethoven, Haydn, Mozart, and Brahms.

CONCERT IN THE MONASTERY.

By H. Cederström.

CHAPTER IV.

THE SONATA ALLEGRO.

THE largest forms of sonata, in which are included string quartets, instrumental chamber music, and symphonies, have almost invariably four movements, the piano sonatas generally three, although Beethoven frequently gave the full four movements even to the piano form, and was followed in this by many later composers. When three movements are presented, the scherzo or minuet is omitted, and the slow movement becomes the central point of the form. The first movement in any of these forms is the so-called "sonata-allegro," also called the "sonata movement," or "sonata form;" it is in quick time, but may be preceded by an introduction which is almost invariably in slow tempo. The introduction may serve various purposes: it forms a contrast to the quick movement which is to follow; it may serve to foreshadow the themes of the movement; and it may also be used as subject matter for development. Beethoven has used the introduction in its most effective mode; the introduction to the "Sonata Pathétique," for example (see Music Volume *** page 200), at once places the auditor in the combat, turmoil, and anguish which characterize that work; and the subject matter of this introduction appears in two portions of the movement following, the development and the coda. The introduction to Schumann's B-flat symphony foreshadows the chief theme of the work; and Schubert uses a beautiful horn melody as an introduction to his C major symphony, repeating this theme with full orchestra at the close of the movement. It will be seen, therefore, that the introduction often becomes an integral part of the work. Beethoven's symphonic introductions are all in slow tempo, except the preluding passage which begins his Ninth Symphony. Here he uses a formula which is often found in his work, a dalliance with tonality, keeping the auditor in suspense as to the real key of the composition throughout the introduction; yet the figure of two notes which forms the basis of this prelude also becomes one of the chief thoughts of the body of the movement, and even reappears in the last movement of the symphony.

The first movement of a classical sonata, one of the most important forms in the whole musical répertoire, is formed by a set contrast of themes, keys, and style. The contrast of themes is made between the chief and the subordinate theme, and here also a contrast of key is found; a contrast of styles is made between the first presentation of the themes, which may be termed melodic and their subsequent development, the latter being essentially non-melodic. A schedule of the divisions of this movement, in major form, may be presented as follows:

Division 1. Chief theme in the key of the composition.
Division 2. A subordinate theme in the dominant key.
Division 3. A short closing theme, or codetta, also in the key of the dominant.

These three themes are now repeated, and they form what is called the "exposition" of the movement.

Division 4. Development or episode in various keys, but avoiding the key of the tonic until its end.
Division 5. Chief theme in the key of the tonic.
Division 6. Subordinate theme, now in the key of the tonic.
Division 7. Closing theme, or codetta, now also in the tonic. (See Music Volume *** page 201.)

This is the final presentation of the themes. Divisions 5, 6, and 7 are called the "recapitulation." In the minor form the following would be the order.

Exposition:
- *Division* 1. Chief theme in the tonic minor.
- *Division* 2. Subordinate theme in the relative major key.
- *Division* 3. Closing theme in the relative major (repeat exposition).

Division 4. Development avoiding the tonic minor until its close.

Recapitulation:
- *Division* 5. Chief theme in the tonic minor.
- *Division* 6. Subordinate theme, either in tonic minor or tonic major.
- *Division* 7. Closing theme, tonic minor or major, if a coda follows to end in the tonic minor; otherwise, the closing theme would generally appear in the tonic minor only. (See Music Volume *** page 207.)

There is also a minor form sometimes used by Beethoven, in which divisions 2 and 3 of the above appear in the dominant minor. This form is not frequently employed, as it presents a too constant minor mode, even divisions 6 and 7 now avoiding the major key. (See finale of Beethoven's Sonata, op. 2, No. 1.) It must be understood that the above presentation is of the strictest form of

sonata; modern composers have made many deviations from this; yet the schedule above given may serve as a guide to the majority of the classical sonatas, especially in the works of Haydn, Mozart, and Beethoven.

It will be observed that the above is but a derivation of the tripartite forms examined in Chapter I., yet there is this point of difference, — in the simpler forms (song or minuet-forms) the middle part is merely in contrast with the first period; in the sonata allegro the development is derived from the first great division, the "exposition." The English call the song-form a "movement of contrast," and the "sonata allegro" a "movement of continuity." Both the strict and the free style are displayed in such sonata forms, — the strict relationship in exposition and recapitulation, the absolute freedom of shape and key in the development, or "middle part" as it is sometimes called.

Let us now proceed to examine these divisions with some detail:

The chief theme: This is generally bold, rugged, and masculine in character. In large sonatas and symphonies its first measures contain a figure or figures from which much succeeding matter is to be developed. In many symphonies this development is found even in the themes themselves. The simple figure of the beginning grows into a great musical thought, a mighty theme. In the strict form this chief theme would end with a cadence in the tonic key; after this cadence there would follow a tributary passage leading to a half-cadence in the related key, or sometimes (in major forms) in the tonic key. If this tributary passage is quite independent, and presents a melody of its own, it may be dissociated from the chief theme, and receive a title of its own, — "intermediate theme."

The subordinate theme: This is in the key of the dominant, in major, the relative major in minor sonatas, and is in strong contrast with the chief theme; generally it is lyrical, melodic, and gentle in character. The chief theme might be described as masculine, the second as feminine. Schiller's poetic idea in his "Song of the Bell:"

> "Wo starkes sich, und mildes paarten,
> Da gibt es einen guten Klang."
>
> "Where strong and gentle are united
> There will be found a noble tone."

is practically applied in the contrast of these two themes. In symphonic and orchestral works the contrast of these themes is added to by differences of orchestration, the subordinate theme frequently introducing sweet wood-wind effects. This subordinate theme leads to a cadence in its own key, and is followed by a closing theme.

The closing theme: This may be original or may be derived from the preceding matter. If derived at all it is generally taken from the chief theme; it should have the characteristic of pressing on towards the close; one feels the final cadence coming during the progress of the short closing theme. In some works more than one closing theme can be used.

The nomenclature of these themes is not the same with all theorists; some call the chief theme "principal theme," "main theme," "principal subject," etc.; the subordinate theme is sometimes called "side theme," "second theme," etc.; the closing theme in England is often called "coda" (a puzzling name, this, since the coda should come at the end of the complete form), and others call it "conclusion theme," "end theme," etc. The repeat of these three themes may be considered an essential of the form, although occasionally conductors and artists omit it; by their repetition we are enabled to thoroughly grasp the spirit of the elements of the work before proceeding to their development. It must be borne in mind that by development we mean the evolution of new musical thoughts from figures contained in the melodies.

The development is essentially modulatory; it moves restlessly from key to key, and supplies a dramatic element which may have been lacking in the themes themselves. Although the subordinate and closing themes, at their first presentation, and the development, are in foreign keys, the signature of the composition generally remains unchanged, in the key of the tonic.

Sometimes, in place of a development of figures, we find a new melody appearing, or original thoughts may enter which are not derived from anything found in the exposition. The division (No. 4) now receives another name; the Germans call it *Mittelsatz;* and many different names are applied to it in America and England, as "middle part," "central theme," "episode," etc. When middle part or development occurs, as Division 4, the key of the tonic is avoided until its end, and the entrance of this key is often a clue to the beginning of the recapitulation; one can readily note the final settling down into the key of the composition. The development, or the middle part, need have no complete ending, a half-cadence, a pause

on the chord of the dominant or the 6—4 may conclude it, or it may lead directly into a return of the themes, the recapitulation.

The three themes now pass again in review, this time keeping well to the key of the tonic. In some sonatas the recapitulation is almost an exact reproduction of Divisions 1, 2, and 3 (the exposition); but the composer need not be fettered by such formality — he may vary the themes as they reappear, and may even introduce new episodes. With the end of the closing theme (Division 7) the sonata-allegro form is completed, but a coda may be added to this form as to any other.

With Beethoven the coda became a great and powerful climax. In some of his lofty works, both orchestral and piano (see the 5th, 6th and 9th symphonies, the "Sonata Pathétique," etc.), the coda becomes a second development, but differing in one important point from the true development (Division 4); while the division called "development" avoids the key of the tonic, is restless in its modulation, and often leads through many keys, the coda, although it may develop figures and contain reminiscences of preceding parts of the movement, seeks the key of the tonic and establishes it. A study of the codas which Beethoven has added to many of his first movement forms will reveal some of the greatest beauties of this composer. The Ninth Symphony, particularly, presents its grandest orchestral touches in the great chromatic coda of the first movement which ebbs and swells like the surges of the ocean.

CHAPTER V.

THE SLOW MOVEMENT — THE SCHERZO AND MINUET.

THE tempo of the slow movement is generally andante or adagio. It may vary from *largo* to *allegretto*, the latter term having been used by Beethoven for some of his slow movements. This should be the romantic movement of the symphony. Development is rarely employed to much effect in a slow movement, hence we find the composer relying more upon beauty of tune than in some other parts of the work; yet the masters of sonata form, Beethoven and Brahms for example, have succeeded in giving very interesting figure-treatment in some of their slow movements. The *larghetto* of Beethoven's Second Symphony is a good example; and the slow movement of his sonata in B-flat, Op. 106, a veritable symphony for the piano, the longest sonata ever written, presents one of the vastest examples of such development in slow tempo. The shape of the slow movement is by no means restricted; almost any musical form may appear. The sonata-allegro, as above described, is sometimes employed (see the *larghetto* of Beethoven's Second Symphony); the song-form may be used (see Beethoven's Sonata in F minor, Op. 2, No 1); the variation form may appear (see Music Volume ***, page 178, Beethoven's Andante in sonata Op. 14, No. 2); the sonatina form sometimes appears (see Beethoven's slow movement, Op. 10, No. 1); and the second rondo-form, to be explained later, can be effectively used (see Music Volume ***, page 214).

Considerable variation of the chief theme is permitted in the slow movement, when necessity of form demands its repetition. Almost invariably, if a composer is obliged to present a theme two or three times, he will vary it at each appearance to avoid monotony. It must be borne in mind that such alteration of theme does not of itself constitute the *variation form*. The variation form consists of a repetition of the single theme over and over without intervening divisions, as will be explained in its proper place.

The third movement (if the regular order is preserved) is usually the scherzo or minuet. With Haydn and Mozart it was almost invariably a minuet. Derived from the old dance form, the minuet reproduced its triple rhythm and its fascinating swing, which, however, became somewhat monotonous after Haydn had introduced it into 147 symphonies and nearly 100 string quartets and piano sonatas, and Mozart had employed it in 47 symphonies and a tremendous number of other compositions. The form used in the minuet is precisely that given in Chapter I., the so-called "Minuet-form," or "Song-form with Trio;" it might be re-stated thus: —

Part 1. A minuet in song-form.
{ Theme.
{ Counter-theme.
Return of theme.

Part 2. A trio; cantabile or singing in character and frequently of the same shape as the above.

Part 3. Return of the minuet unaltered.

The formalism and the constant repetitions of these minuets made them especially irksome to Beethoven. Already in his First Symphony he seemed dissatisfied with the dance-like character

of this movement as portrayed by his teacher Haydn, and the minuet there written seems to picture a tonal giant tugging at his fetters; it is bolder than any minuet that Haydn ever achieved. In his Second Symphony Beethoven went still further, and replaced the minuet with the movement called "scherzo;" this was a freer form, and one which admitted of some development. The freedom of the scherzo is such that one may scarcely venture to define its modern shape; almost any form and any rhythm may appear; yet the fact that the scherzo was invented to replace the minuet is constantly impressed upon the analyst by the resemblance between the two. The overwhelming majority of scherzo movements are written in 3—4 rhythm; and, like the minuet, they have a trio as the central part, in contrast with the movement beginning and ending the form; in fact, the scherzo of Beethoven's Second Symphony, the first symphonic scherzo ever written (published in 1802), is more minuet-like than the movement called "Minuet" in his First Symphony.

The shape grew more and more free; yet although Beethoven sometimes used an even rhythm (2—4, for example) in this form, all of his symphonic scherzos are in 3—4 rhythm, and all present the contrast of the trio with the body of the work.

That the scherzo did not abolish the minuet is shown by the use of the latter in Beethoven's Fourth and Eighth Symphonies, written after his invention of the new movement. The earliest scherzos were playful (the word itself denotes "a playful movement"); but gradually other emotions were permitted, and frenzy, ecstatic joy, and other feelings requiring rapid tempo for their portrayal, occurred in the modern scherzo.

The scherzo may be considered the popular movement of the symphony, and permits the composer to introduce the national music of his own country if he desires. We therefore find many Russian folk-dances and song-melodies in the works of Rubinstein and Tschaikowsky, Bohemian national touches in the symphonies of Dvorák, the Norwegian Halling in the sonatas and classical instrumental works of Grieg, because of the door opened by the establishment of the scherzo. Probably the best master of the playfulness of this movement was Mendelssohn, whose scherzos are often the finest movements of his symphonies, string quartets, etc. Chopin was the first to write independent scherzos as apart from symphonic or sonata composition.

Beethoven extended the form of his scherzo in his Seventh Symphony, as follows:

Scherzo.
Trio.
Scherzo.
Trio again.
Chief theme of scherzo.

This unnecessary and rather monotonous repetition led Schumann to invent the scherzo with double trio, somewhat similar to the song-form with double trio given in our musical selections. In Schumann's First Symphony, in B flat, we find the following form of scherzo:

Scherzo
1st Trio.
Scherzo.
2d Trio.
Scherzo.

If any movement is omitted from the succession of the sonata form, it is the scherzo or minuet, which is not generally found in concertos and medium-sized sonatas.

Brahms substituted a shorter form for the scherzo. He was never successful in its playful mood, and demanded a movement where greater freedom of emotion might be permitted; the result was a movement called the "intermezzo." This was shorter than the full scherzo and rather bipartite than tripartite; after a short first part, a second part was placed in contrast, then a reminiscence of the first part given in contrast as a coda.

Summing up, we may state that the modern scherzo may appear in almost any shape, rhythm, or tempo, and may express varying emotions, but the scherzo in general follows the minuet (although it is more free than this form) in shape and rhythm. The scherzo often leads directly into the finale.

CHAPTER VI.

THE FINALE.

DIFFERENT forms are used in the presentation of the finale. The finales of the early symphonies composed by Haydn and Mozart show very distinctly the influence of the finale of the suite. It may be recalled by the reader that the suite ended with a lively and rollicking Gigue, and that it was held to be an essential of an instrumental cycle form to end with a merry movement. This erroneous idea seems to have been accepted without cavil by

Haydn, and his finales are almost invariably of a cheerful character; he most frequently employed the rondo form (to be explained later) in these; sometimes, also, the sonata-allegro, as described in Chapter III., was allowed; but in this case there was less of development and more of geniality than in the first movement. Beethoven was the first to turn from this unceasing jocoseness, which finally became as conventional as the smile upon the face of a ballet girl. The change of the third movement into a scherzo necessarily involved further alteration, for one cannot displace one movement of a cycle without in some degree affecting others. Since merriment appeared as the characteristic of the scherzo, some other emotion must needs be found for the finale.

In his Second Symphony, Beethoven gave a resolute character to his last movement which was a novelty in this part of the symphony. In his "Heroic Symphony" he found a new ending in the "grand variation" form. Beethoven, in common with other composers, was troubled to find a proper counterpoise to the strength of the sonata-allegro form (the best symphonic movement) which was used at the beginning of the symphony. He seems to have come nearest to a proper foil to its strength in the variation form as used in the Third Symphony. In addition to the variation form, the sonata-allegro is often employed for the finales, but generally with less of development than in the first movement, and more of brilliancy. The sonata-rondo (to be explained later) also appears.

Many innovations have been made in the finale since Haydn's day. The first instance of a reappearance of themes and figures from the preceding movements of the symphony in the finale, is found in Beethoven's Ninth symphony, where the chief theme of each of the first three movements reappears. This device has been followed by many modern composers. Brahms especially has used it with telling effect in the finale of his first symphony, the great C minor, a worthy successor to the Beethoven Ninth. The use of vocal chorus and solo vocalists in symphonic finale is also due to Beethoven, who employed these in his Ninth Symphony, and has been followed by Liszt, Berlioz, and others, none of whom have succeeded in mingling the two forces, orchestral and vocal, successfully.

We have spoken of the earliest symphonic finales as constantly jovial. Two exceptions must be made to this rule: the finale of Mozart's tender G minor symphony is dignified, while the last movement of his great symphony in C major, called the "Jupiter," is a most earnest display of contrapuntal writing of the highest type.

THE SONATINA.

This form, derived from the sonata, can be explained very briefly, since its movements present nothing that is new or different from the movements already studied, with a single exception: The sonatina may be regarded as a simpler, shorter, and somewhat freer sonata; it consists of two or three movements which are varying in form; the first may be a song-form, as presented in Chapter I., or it may be a sonatina form (explained below). The second movement (if there are three) would be a short, slow movement, generally one of the song-forms already described; the third, or finale, might be a simple rondo, a sonatina movement, or a song-form. When two movements only are used, any of the above forms may be applied.

The Sonatina-movement is a derivation from the sonata-allegro already studied; it might be characterized as a sonata-allegro without any development, episode, or middle part. In its shortest form it may be summed up as follows:

Division 1. Chief theme in tonic key.
Division 2. Subordinate theme in related key
(This would be the dominant key in major sonatinas, and generally a relative major key in minor sonatinas. There might also be a short closing-theme or codetta. These two themes, with the additional closing-theme, which is not always present, form the exposition, which is generally repeated. The recapitulation follows immediately in this form.)
Division 3. Chief theme in tonic.
Division 4. Subordinate theme in tonic; after this the closing-theme, if any has appeared in the exposition.

CHAPTER VII.

THE RONDO FORMS.

THE Rondo is one of the oldest of the forms in use to-day. Our forefathers seemed to enjoy repetition in music much more than the audiences of the present do; and as a rondo form relies on repetition for its chief effect, we can understand its being copiously employed by the composers of the seventeenth and eighteenth centuries.

The etymology of the word gives sufficient clue to the shape of the form; for "rondo" simply means "round" in English, and it is so called because the chief theme continually comes back again; the rondo being founded upon from two to a half dozen reappearances of this theme. Naturally in such a form, beauty of theme is necessary, and the chief success of a rondo lies in the attractive character of its most important melody.

Although the rondo is freely employed in the sonatas and symphonies of Haydn, we must look further back than the "father of instrumental form" for the true founder of this shape. Philipp Emanuel Bach was the true founder of the rondo, and we find its shape as clearly defined in his works as in those of Mozart or Haydn, who follow him.

There is much difference between theorists in the classification of the rondo: Raff in his Frankfort Conservatory generally classified but three rondo forms; Marx, in his statement of modern forms, gives five classifications; and some theorists find six rondo-forms which are distinguishable one from another. The following classifications, however, may be ample for working purposes: —

First Rondo. The form of this may be simply stated as theme, counter-theme, and return of theme. At first sight this may seem to be a reproduction of the three-division song-form of the first chapter, but the divisions are much larger than any which are found in song-forms; in fact, each division may be a song-form in itself.

If, however, in a rondo, we find three song-forms in the following order: first song-form, second song-form, first song-form repeated, we are confronted with a strong resemblance to the "song-form with trio," or minuet form, already described. As a matter of fact, this resemblance does exist; but the first rondo is far more homogeneous, more connected in its divisions, than the "song-form with trio;" the parts are often united by modulatory passages which can be called "transition" or "returning passage," according as they lead into a new theme or back to the chief theme; and there is no such sharp sundering of parts as we find existing between the song-form and its trio.

Second Rondo Form. In its simplest form this seems but an extension of the three-division song-form; as it possesses five divisions, some theorists call its smallest presentation the "five-division song-form;" but as the essence of the rondo is the return of the chief theme, as this theme appears three times in the form, and as the old masters distinctly name their works in this shape "rondos," we prefer, in this case, to discard the "song-form" title altogether. The divisions of the second rondo are as follows: —

Division 1. Chief theme in tonic key.
Division 2. First counter-theme in some related key.
Division 3. Chief theme in tonic
(As in division 1, although it may be slightly varied if the composer desires, and it may even return in an incomplete shape.)
Division 4. Second counter-theme in some related key other than division 2.
Division 5. Final return of the chief theme in tonic key.

The above divisions may be bound together more closely by transitions and returning passages; sometimes the succession of keys may vary, and division three appear in some foreign key; sometimes each division is a simple period; and at times an entire song-form may appear as the chief theme, or as either of the counter-themes. An excellent example of the second rondo is found in the slow movement of Beethoven's "Sonata Pathétique" (see Music Volume ***, page, 214).

Third Rondo. This is simply an extension of the rondo form just explained. It gives one more appearance of the first counter-theme, and of the chief theme at its end, the succession of themes now being as follows: —

1. Chief theme. 2. First counter-theme.
3. Chief theme. 4. Second counter-theme.
5. Chief theme. 6. First counter-theme.
7. Chief theme.

The succession of keys being as in the second rondo.

Sonata Rondo. This is a derivation from the sonata-allegro form explained in Chapter IV. It is practically the same shape with less development, and with two more appearances of the chief theme. We present a schedule: —

Division 1. — Chief theme in tonic key.
Division 2. — Subordinate theme in the regular related key of sonata-allegro (the dominant in major, the relative major in minor keys).
Division 3. — The closing theme in the same key as Division 2.
Division 4. — Chief theme in the tonic key.
Division 5. — Development or middle part (episode) going through various keys, but avoiding the key of the tonic until its close. The sonata-rondo would present less

of development or figure-treatment than the sonata-allegro, and would rely more for its effect upon attractive melody.

Division 6. — Chief theme in tonic.
Division 7. — Subordinate theme in the same key.
Division 8. — Closing theme also in tonic.
Division 9. — Chief theme in the tonic.

It will be seen that the elimination of Divisions 4 and 9 would result in the establishment of the sonata-allegro. An excellent example of this form is found in the finale of Beethoven's "Sonata Pathétique" (see Music Volume ***, page 217).

Sonatina Rondo is derived from the sonatina form as the sonata from the sonata-allegro. It may be scheduled thus: —

Division 1. — Chief theme: tonic key.
Division 2. — Subordinate theme in the regular related key.
Division 3. — Chief theme: tonic key.
Division 4. — Subordinate theme: tonic key.
Division 5 — Chief theme: tonic key.

Some theorists regard this as merely an extension of the first rondo form. The student will readily perceive, however, that this rondo is established from the sonatina form very clearly, as the sonata-rondo grows out of the sonata-allegro.

In committing these forms to memory some clue to the classification may be found in the number of appearances of the chief theme. In the first rondo it appears twice; in the second rondo and sonatina-rondo, three times; in the third rondo and sonata-rondo, four times. There are also rondo forms of a freer character, in which the theme appears still oftener. Martini's Gavotte is an example of one such rondo (see Music Volume ***, page 223), in which the theme appears six times, alternated with five counter-themes.

As the general taste of the musical composers of the present is against repetition, the rondo form is one held in small favor in the modern répertoire. While Haydn, Mozart, and even Beethoven used it frequently, it is the exception to find a rondo form in the larger classical instrumental compositions of to-day.

VARIATION-FORM.

This is employed as a sonata movement occasionally, and is also, like the rondo, minuet, etc., used in separate compositions. The slow movement of sonata or symphony sometimes makes very attractive use of variations; and Beethoven has employed them most successfully in this as well as in the first and final movements.

A theme for variation may be preceded by an introduction, and may in itself be a song-form, generally of two divisions. The theme should be especially melodious, since it is to appear frequently; and it should possess some marked characteristics of rhythm and structure which would aid the auditor to recognize it through all its transformations. When the variation-form is used in the slow movement all the variations are generally in the same tempo, and it is sometimes called *andante con variazioni* (see Music Volume ***, page 178); when employed in other movements changes in tempo may occur, and sometimes even changes in the structure of the theme. If the theme be in major it might be turned into minor for at least one variation, and *vice versa* with a minor theme.

Beethoven may be considered the most wonderful master of variations, although Brahms follows him closely in rank in this field. Among great examples in variations for the piano we may mention Mendelssohn's "Variations Sérieuses," Schumann's "Études Symphoniques," Brahms's "Variations of a Händelian Theme" (Op. 24), and the same master's variations (Op. 23) on Schumann's last composition, written just before the composer attempted suicide.

In this connection we may be pardoned a slight digression from the domain of musical form, and be permitted to warn the student against placing implicit faith upon the titles indicating the "last composition" of this or that composer. "Beethoven's Farewell to the Piano," sometimes also emphasized with "His Last Composition," was written some years before he achieved his greatest piano sonatas, and was by no means in the nature of a farewell to anything; he wrote it as a fugitive composition in the album of a certain lady of rank. "Weber's Last Waltz," sometimes also called "His Last Thought," was neither his last nor his first; in fact, it was not Weber's composition at all, but a little work composed by Reissiger which was found among Weber's papers in London after his death.

To return to our variations, other famous works in this form are Beethoven's variations in the slow movement of the "Kreutzer Sonata," his symphonic variations in the finale of the Third Symphony, the "Heroic," and, above all, his tremendous variations with voices and orchestra in

the finale of the Ninth Symphony, probably the vastest variations ever written; nor should we forget Brahms's variations in the finale of his Fourth (E minor) Symphony. Both Brahms and Beethoven, in their variation work, often crossed the border-line into development or figure-treatment.

The distinguishing point between these two modes of musical treatment is that variation generally treats a theme as a whole, keeping its structure intact; while development treats the figures of a theme, altering its structure completely. If a man caused his house to be repainted, ornamented, and decorated, it would be similar to variation; if he pulled down the edifice, and built another with its material, it would resemble development. We might recognize the second edifice by its bricks, but not by its shape.

In the older compositions we find the shape of the original theme always religiously preserved, and we can readily trace variations as far back as the Elizabethan composers and in the works of still earlier Italian musicians. In the time of Bach it was customary to distinguish between a full variation of a theme and its mere ornamentation by the addition of turns, thrills, and other embellishments. The latter treatment was called "Les Agréments." Bach was the mountain peak of the old style of form-preserving variation; and his great chaconne, for violin solo, remains one of the gems of the old school. There was a decided recession in the composition of variations after Bach's time; but Beethoven's freer treatment, described above, once more gave splendor to this form. The patient ingenuity of the old composers in building up variations may be illustrated by the fact that Händel made sixty-two variations on one little theme in G major, keeping the structure intact in each of the different presentations.

CHAPTER VIII.

OTHER CLASSICAL FORMS, — CONCERTOS, OVERTURES, CHAMBER MUSIC, ETC.

THERE are other compositions besides symphonies and sonatas in the classical cycle forms scheduled in Chapter III. The concerto is one of these. The concerto is, or should be, practically a symphony, with a solo part intertwined; its chief impression should be orchestral, and it should never degenerate into a mere display of a single instrument; in the greatest concertos, as in Beethoven's "Emperor" concerto, or Brahms's piano concerto in B-flat, the soloist is obliged to abnegate his individuality, and become a part of the general effect; to sink himself in the *ensemble*.

The classical concerto, to which the above definition applies, was founded by Mozart. Before the time of that composer concertos were a very free and indefinite form, somewhat resembling the sonata, but relying on contrapuntal and fugal effects for their chief charm. Mozart gave to the concerto three movements, and that has been the recognized number ever since; although occasionally we find these merged into a single movement, and still more rarely encounter a concerto of four movements, as Brahms's second piano concerto.

The three movements of the regular form are generally, first, an allegro; second, a short, slow movement; third, a brilliant and rapid final movement.

Even when the concerto is in the classical shape its presentation of the sonata form is by no means always clear and definite, as we find it in sonata or symphony; alterations in the succession of keys, the abbreviation of certain divisions, the interpolation of brilliant display work, these are points which are conceded to the demands of the solo artist and his instrument. The scherzo or minuet movement is the one omitted from the regular succession of three.

There are concertos for almost every musical instrument that is heard in the concert-room; but the best, most important, and most numerous concertos are those written for the piano, since this instrument adds a new tone-color to the orchestra, and its character is an excellent foil to the orchestral equipment; yet violin, violoncello, bassoon, oboe, and other concertos exist; even the kettle-drum has been honored with a concerto to display its explosions!

The form of the three movements may be summarized briefly:

The first movement is generally a sonata-allegro, but with many deviations from the form we have analyzed. The orchestra (called *tutti*) generally presents the themes of the exposition, which are then repeated in combination with the solo instrument; it will be seen, therefore, that the repetition of the exposition is not a literal and exact one as is the case with the symphony. Sometimes the chief theme only is repeated, and sometimes, too, the succession of the keys is changed from the order of the strict sonata form, and these

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By E. L. Garrido.

changes are made in behalf of the solo instrument, in order to give it more prominence. The solo instrument appears prominently in exposition, development, and recapitulation; but all transitions and returning passages are generally given *tutti* (by the orchestra). The coda of the first movement, and sometimes also of the last, often introduces a display of technical brilliancy for the solo instrument; this is called a *cadenza*. We shall examine this later on.

The second movement is a slow movement; it is much shorter than the other two; it is most frequently a song-form combined with variation. A favorite device is to give the melody to some orchestral instrument, and allow the soloist to wreathe embellishments around it. In the slow movement, of course, emotion, melody, and romance should rule; the slow movements of Chopin's two piano concertos are remarkable in this field. The slow movement frequently leads directly into the finale. This latter is full of display and brilliancy, and generally leads to an exciting climax; it is very frequently in rondo-form.

The Cadenza has been alluded to as a display of technique; as each solo artist has his own especial points of excellence in performance, it is by no means uncommon to find him writing his own cadenza; this may be done even where the composer has written cadenzas to be interpolated in the work. The cadenza is not printed in the body of the composition, but its place is generally indicated there by a hold placed over a half-cadence, a chord of the dominant or the six-four; it is sometimes quite long: cadenzas which occupy a dozen or fifteen pages of printed music are not uncommon. Naturally the cadenza must be developed from figures of the movement wherein it occurs, since otherwise it would be an incoherent display of individual virtuosity.

It is interesting to know that Beethoven gradually turned from the cadenza, as being an interruption to the flow of orchestral thought; in his Fourth Piano Concerto, at the point where the cadenza is to enter, he writes: "La cadenza sia corta!" — "Make the cadenza short;" and in the coda of the first movement of his Fifth Piano Concerto, the famous "Emperor," he introduces a still longer Italian sentence, saying, "Make no cadenza here, but go on immediately to the following." When one examines "the following," it proves to be a most brilliant cadenza for piano and orchestra in combination. Beethoven was determined that his orchestral work, which has been called a "symphony with piano obbligato," should not be turned into a mere piano composition.

Some of the later composers, Brahms included, have turned their faces against the introduction of this solo display in their concertos; but the cadenza is likely to rule in the concert-room for a long while yet, since it is grateful to the artist and exciting to the public; it is placed at the very end of the movements where it occurs, partly in order that it may not interfere with the form, but partly also that the soloist may be able to gather his especial laurels.

A few words regarding the répertoire of famous concertos may conclude this subject. Beethoven may be regarded as chief concerto composer. Of his five piano concertos, the first two are scarcely brilliant enough for the technical demands of latter-day specialists, and are generally relegated to conservatory graduates (as is also Mendelssohn's G minor concerto, once famous among artists); his third concerto, C minor, represents a transition epoch, and shows the composer taking leave of the formal style which Mozart had employed in his concertos. Beethoven's fourth and fifth piano concertos are his finest achievements in this form; the fourth, G major, being all delicacy and refinement; the fifth, E flat major, "The Emperor," being full of rugged majesty.

More than one solo instrument may appear in the concerto; and Beethoven once used three together, his triple concerto introducing piano, violin, and violoncello simultaneously with orchestra. Beethoven's single violin concerto, D major, still remains far above all other attempts in this field.

Chopin's concertos scarcely carry out the symphonic requirements of the form; regarded as piano compositions, they are glorious works, but they by no means impress the auditor with orchestral beauty. Of all the great composers, Chopin was the only one who achieved all his reputation in a single field of composition (the piano répertoire); his orchestral setting to his two concertos has been revised by Klindworth, Taussig, etc. Liszt's two piano concertos are rather too rhapsodical for concerto forms. One cannot attempt an analysis of these in the classical vein. Brahms, with his two piano concertos and one violin concerto, has approached the nearest to that orchestral style which culminated in Beethoven. Bruch's G minor violin concerto, Mendelssohn's violin concerto, and a host of other concertos

could be named; but the above remain the most important works of this domain.

CHAMBER MUSIC.

There are other cycle forms which apply the sonata shape in its classical model; of these the string quartet may be held the most perfect. The classical string quartet almost always presents the four movements of sonata, as defined in Chapter III., and in their regular order. Haydn may be considered the father of the string quartet, although Dittersdorf was no contemptible competitor in the field. Mozart elaborated the model given by Haydn; and in the string quartets by Beethoven we obtain the fullness of this form. Instrumental trios, quintets, sextets, etc., in fact nearly all the instrumental numbers of what is known as "chamber music," present the sonata form.

THE OVERTURE.

There is another form which is closely allied, not to the sonata as a whole, but to the sonata-allegro (See Chapter IV.), which we have characterized as the best single movement used in sonata forms. A majority of overtures present this shape with some degree of clearness. The name "overture" indicates the purpose of the composition; *ouvrir* in French signifies "to open," and the overture is intended as an "opening piece." The earliest Italian operas, from 1600, ushered in their vocal work with a slight instrumental prelude, which was generally called "symphony." This symphony was entirely free, and presented no definite musical form.

It was Lulli (sometimes also spelled "Lully"), the old French composer, who first gave the overture a definite form; this form was not unlike that of the old sonata, in that it contained two movements in contrast with each other; but with the overture the first movement was not of so important a character as with the old sonata. The first movement of the so-called "Old French overture" was generally a slow and stately one, rather harmonic in its structure, presenting definite melody; the second movement was of brisker tempo and more contrapuntal in its character. Not only do the operas of Lulli present such overtures, but the form was used by all the chief operatic and oratorio composers from the last half of the seventeenth century to the time of Mozart, one hundred years later. Oratorios of Bach and Händel have this shape, and the overture to the "Messiah" is a good example.

The Classical Overture was founded by Mozart, who used it in connection with each of his operas. It was simply an application of the sonata-allegro without a repetition of the exposition. Generally the themes of the classical overture were not taken from melodies of the opera, but were original. Weber's works formed an exception to this rule; for in his overtures, while using the classical form, he still employed melodies which were taken from the opera itself.

The Dramatic Overture may in some degree follow the lines of the classical overture, or may present a freer form; but its chief characteristic lies in the fact that it presents an epitome of the play or opera which is to follow. Beethoven was the chief composer in this graphic form. It may be recalled that he wrote but a single opera, "Fidelio," but composed four overtures, at different times, to this work. The order of these overtures is not properly indicated by the numbers attached; they were probably written in the following sequence: "Leonora, No. 2," "Leonora, No. 3," "Leonora, No. 1," "Fidelio." In this set of four, the "Leonora No. 3" may be regarded as a good example of the dramatic overture.

The plot of the opera is about as follows: Pizarro holds Florestan, the hero of the piece, as a prisoner in his castle, and endeavors to starve him to death. He keeps the fact of his detention a secret, as the governor of the province is an intimate friend of Florestan. The wife of the hero, Leonora, disguises herself as a boy, and takes service in Pizarro's castle. She becomes assistant jailer to her own husband, and by gifts of food prevents the accomplishment of the project of starvation. Pizarro, after waiting impatiently for his prisoner to die, determines to slay him. As he rushes upon the unhappy Florestan to fulfill this intention, the supposed boy throws off his disguise and shrieks, "Kill first his wife!" At just this moment (for it all happens as pat as in a *New York Ledger* story) a trumpet is heard in the distance, — the governor of the province is outside the castle; a moment later a trumpet signal is heard close by; he has entered the castle, and in an instant is in the cell of his old friend Florestan, and naturally all ends happily.

An outline sketch of these events is found in the overture "Leonora, No. 3," in which the sadness of the unhappy pair, the attempt at assassination,

the trumpet signals of the approaching governor, and the final delirium of joy at the release from death, and happy reunion, are all indicated, without being a mere repetition of the operatic scenes.

One might in the same manner consider Wagner's "Flying Dutchman" overture, and his "Tannhäuser" overture, as examples of the dramatic overture; for they give the spirit of the operas which they precede, admirably. Thus the opera of the "Flying Dutchman" portrays the loving devotion of Senta as the means whereby the hero's final salvation is attained; the overture presents a struggle between two themes which indicate this; a fierce motive (a *leitmotif*) represents the "Flying Dutchman;" a tender, gentle theme, the love of Senta. At the end of a great struggle the work comes to its climax with a glorification of the Senta melody.

"Tannhäuser" has as its chief idea a struggle between religion, as represented by the Holy Elizabeth, and vice, as represented by Venus. These two forces combat for the soul of Tannhäuser; at the end religion triumphs, and the pious theme of the pilgrims comes to a superb climax in the coda of the overture. Yet this latter work is not far removed from the sonata-allegro of the classical overture; but its development is of more graphic purpose than the mere presentation of an exposition, an episode, and a recapitulation.

The Concert Overture. Although this is generally of the same shape as a classical overture, it receives its name from the fact that it is not attached to any play or opera, but is a work intended purely for concert performance. Mendelssohn may be considered the founder of this form, although Beethoven wrote one such piece rather by accident than design, — his "Dedication of the House," an overture written to celebrate the opening of a theater, and therefore unattached to any opera.

Mendelssohn's concert overtures were generally program-music. "Program-music" may be defined as instrumental music which attempts to convey a definite picture. The school has been frequently attacked, for instrumental music can never hope to be as definite in its statements as poetry and painting. Mendelssohn was sometimes reproved for his tendency toward this vein of pictorial writing, and replied to his critics, "Since Beethoven has opened the door any one may enter in!" meaning that Beethoven had sanctioned program-music by causing his "Pastoral Symphony" to give a series of definite pictures.

With Mendelssohn, the picture intended to be conveyed in the concert overture is indicated by the title only; the names attached to these works are, "The Hebrides," or "Fingal's Cave," "Fair Melusina," "Becalmed at Sea and Prosperous Voyage," etc. The danger of such a school of writing is that the auditor may imagine too much, music being an art in which the imagination is prone to take rather hazardous flights. An instance of this may be adduced in connection with the last-named overture, which is usually entitled "Calm Sea and Happy Voyage." Its German name "Meeres-stille und glückliche Fahrt" — is the title of one of Goethe's poems, which should be translated "*Becalmed* at Sea; and Prosperous Voyage," as the poem presents two definite pictures, which the overture attempts to reproduce, the first being an introduction, and portraying a ship in the midst of a dead calm. It is an effect not far removed from Coleridge's "Ancient Mariner";

> Day after day, day after day,
> We stuck, nor breath, nor motion;
> As idle as a painted ship
> Upon a painted ocean."

We have ventured upon the translation of the first stanza of the German poem, that the reader may understand the meaning of the slow introduction to the overture, which pictures desolation and anxiety: —

> "Deepest silence on the waters,
> Without motion rests the sea,
> And the sailor views despairing,
> Endless, flat monotony.
> Not a breath of air is stirring,
> Horrid silence as the grave,
> In the whole wide, vast horizon
> There is not a single wave."

It will thoroughly prove the fallacy of definite program-music, when we state that many auditors, deceived by the title "Calm Sea and Happy Voyage" imagine this despairing introduction to picture a calm, smiling sea, and a ship sailing over it!

It is by no means necessary, however, that the concert overture should always enter the field of program-music. Beethoven's "Dedication of the House" was certainly not of this school, and there are many other works of similar non-pictorial character in the répertoire of concert overtures. The title, "Concert-Overture," by itself would generally signify a sonata-allegro for orchestra.

The Medley Overture is said to have had its origin in England; it consists merely of a medley of melodies taken from the opera which is to follow. In this form, if it can be called a form, the only law that need be followed is that of contrast, although it is eminently desirable that the work should begin and end in the same key. Sometimes the first melody in such an overture gives a three-division effect (theme, episode, return of theme), and an instance of this may be found in the first part of the "Zampa" overture by Herold. Most of the overtures of Rossini, Sir Arthur Sullivan, Auber, and other light-opera composers are in this vein.

Wagner replaced the overture in his later operas by a prelude or *Vorspiel*. The prelude when used in connection with opera is not an independent composition, but leads directly into the first scene of the work, without pause. One of Wagner's theories was that continuity should rule in opera; and the overture being a separate composition was in opposition to this theory. He therefore discarded the overture in favor of the prelude, which did not separate itself from the body of the work. How earnestly Wagner felt in this matter may be judged from the fact that he rejected the overture to "Tannhäuser" in his later days, as being untrue to his ideal of art. He deliberately cut out its coda, the greatest climax in the répertoire of overture, and substituted a dreary transition passage, attaching the work to the first scene of the opera.

We must not, however, consider that Wagner was the inventor of the prelude, since it was used by Gluck in many of his later operas. Wagner, however, gave it a new purpose and more definite meaning. In his preludes we find important guiding figures (described in Chapter I.), which are developed with many changes of harmony and modulation. The prelude to "Lohengrin" is an instance of such development; for in this we have the "Holy Grail" figure, connected with Lohengrin, given at the very outset; and the rest of the prelude is evolved from this important figure (see article on "Opera").

In the prelude to "Parsifal" the communion motive and the faith motive alternate in presenting a religious thought, before one is ushered into the first scene.

Some preludes are diminutive overtures, possessing themes in the related keys, although not with the strictness of relationship found in classical overture.

In modern times many composers have endeavored to strike into a new path in their employment of the overture. Some have substituted a vocal prologue; Gounod, for example, in his "Romeo and Juliet," omits the overture in favor of the prologue-chorus, in which all the characters, forming a striking tableau, sing of the "feuds of Verona." In "I Pagliacci," by Leoncavallo, we find a prologue very fittingly given to a baritone voice, and occupying the place of regular overture. In "Elijah," Mendelssohn precedes the restless and foreboding fugue, which forms the body of the overture, with a vocal recitative, in which the curse of the prophet is pronounced upon the land, which vocal beginning makes clear all the instrumental part that follows. In the well-known "Cavalleria Rusticana," by Mascagni, a tenor serenade is interpolated in the midst of the overture and is of special significance, leading the auditor at once into the tale of love, jealousy, and murder that is to follow.

These are a few of the innovations which have taken place in the overture form, and the possibilities are by no means exhausted. It may be remembered that many of Beethoven's overtures were attached to plays and ballet instead of opera. He has written in almost all of the forms mentioned above. His "Fidelio" overture is practically a medley form, his overture to "Prometheus" (the single ballet which he wrote) is in the classical form; his power in "dramatic overture" has already been spoken of.

Weber's overtures are considered the perfection of brilliant contrast and theatrical style, yet do not altogether desert the classical form. Goldmark's overtures (sometimes approaching the classical shape) are so vast as to become symphonic poems. Berlioz has produced some of the most powerful orchestral effects in his overtures, which are great examples of skill in tone-color.

When the preludes of Wagner are performed in the concert-room it must be remembered, since the prelude is not an independent form, but attached to the opera, that some other hand has added a final cadence to fit the work for separate performance.

CHAPTER IX.

DRAWING-ROOM MUSIC.

ALTHOUGH the compositions generally found in the drawing-room répertoire afford nothing in the matter of form that has not already been touched

TAMBOURINE GIRL. *W. Kray.*

upon, it may be desirable to speak briefly of the style and character of some of the compositions which the amateur is likely to be called upon to play. Almost all of these compositions are either in the song form or minuet form (song form with trio); yet they differ from each other in style, rhythm, structure, and extent. Many of these forms have been derived from dances; and these we will consider first, merely premising that when a dance is idealized for drawing-room performance its tempo is often changed from the terpsichorean speed.

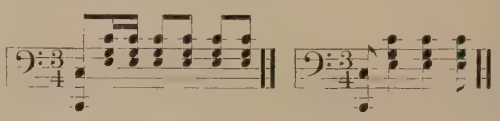
The divisions in dance-music are generally square cut and formal, the period consisting of sixteen or thirty-two measures.

The Waltz. — Although the rhythm indicated in the concert waltz, as in dance waltzes, is 3—4, the performer will find that the measures are alternatingly strong and light, and that the true swing of the composition is best produced by reading it as if it were 6—4. In the concert waltz strong effects are produced by the sharp contrast of a legato theme with one played staccato.

The Polka, derived from the "pulka" of Bohemia, is too skipping and monotonous in its rhythm and style to form good instrumental music; yet Raff has made a fair use of this rather tawdry style in his "Polka de la Reine," and Rubinstein and Bendel have also used the form.

The Mazurka. — This Polish dance has been gloriously idealized by Chopin. It is most elastic and graceful, admitting of some syncopation, and presents more contrasts than are possible in the waltz; its rhythm is 3—4; its dance tempo is slower than that of the waltz.

Polonaise. — This is the finest and freest of all the dance-forms; it is the idealization of rhythmic caprice. It is processional in its character, and is said to have had its origin at the coronation of the weakest of the list of Polish monarchs. In February, 1574, Henry of Valois, Duke of Anjou, was summoned from France to become king of Poland. At Cracow, where he was crowned, the Polish nobility assembled to pay him homage. In long procession, to the sound of stately music, they passed in slow review before their new monarch, introducing their wives and relatives as the cortège swept on. Five months after, the shallow-pated king fled from Poland to become king of France under the title of Henry III.; but the effect of the stately processional which opened the court ball was not to be so evanescent. At every great court ceremony thereafter, particularly when welcoming a stranger-king, the Polish nobility repeated the musical pageant, which gradually took form, and received the title of the "Polonaise."

The Polonaise is filled with bold syncopations of both accompaniment and melody, the former having chiefly the following rhythms in contrast with each other: —

and sometimes adding a very simple rhythmic construction of eighth notes to heighten the effect. The tempo is generally majestic and deliberate, with military style.

The Galop is rather too tawdry in its explosive effects and its rigid 2—4 rhythm for any valuable instrumental music to be derived therefrom; but occasionally it serves to display the power of the performer in heavy chords and octave work.

Rhapsody. — This has been very prominently used by Liszt, and its name sufficiently indicates its character. The "Hungarian Rhapsodies" of Liszt are, of course, founded upon the folk-music of that country. They have a general form, which may be described as follows: first, a mournful and melancholy theme or division, which is called the "Lassan;" second, a wild and and even frenzied finale, which is called the "Friska." The placing of these two modes of expression in sharp contrast with each other is one of the devices constantly used by the Hungarian gypsies in their performances.

The Tarantella. — This is one of the most rapid movements in 6—8 rhythm; it is generally running in its character, while the *Saltarella*, in the same rhythm, is more skipping and not quite so rapid.

The *Barcarolle*, or boat-song, or the "Gondoliera," is generally a slow and dreamy 6—8 rhythm. In this connection it may be stated that while any emotion may be expressed in any musical rhythm, certain rhythms have definite characteristics; thus, a rapid 6—8 would be the brightest possible rhythm, and tarantellas, quicksteps, etc., use this rhythm. A slow 6—8 would be one of the most cradling and lulling of rhythms, and therefore boat-songs, cradle-songs, slumber-songs, etc., would present this rhythm. A 3—4 rhythm is one of the calmest and tenderest of rhythms, and admits of

great expression, therefore the majority of the slow movements of music are in this rhythm. The 12—8 rhythm would suit well to lofty processionals, and Händel used 12—8 rhythm very constantly for pastoral effects as well. A 9—8 rhythm is suited to very expressive and tender music.

The Fantasia and the *Caprice*, or *Capriccio*, have their character indicated sufficiently by the title.

The *Transcription*, or *Paraphrase*, is the transferring of some musical composition from one instrument to another, as a song turned into a piano work, or a piano composition altered for violins.

A Nocturne means simply a "night-piece," generally a composition having something of the pensive character of night within its measures. Field was the originator of this title and form, but was followed and eclipsed by Chopin.

The Étude is a study, and therefore of technical difficulty; but Chopin used the word in another sense, and his *études* are studies only in the sense that an artist's sketch might be a study, less finished, and more in outline than an oil-painting. *Novelette* and *Ballade*, as well as *Legende*, are stories told in tones. In such compositions the narrative style would appear in the music, which would seem to be telling some dramatic tale or legend.

The *Albumblatt*, or *Albumleaf*, is a short composition, generally in song-form, such as might be written upon the leaf of a lady's album. It ought never to be a developed or an extensive work, and should have an improvised, impromptu character. It is scarcely ever larger than a song-form in size.

The *Serenade* would, of course, have the lulling and soothing character implied by its title; but there also exists in music the opposite of the serenade, a song which is intended to awaken the hearer from slumber, rather than soothe to rest. This is called the *Aubade;* it is a form as old as the time of the Troubadours, who called it the *Alba;* "Hark, hark the lark," from Shakespeare's "Cymbeline," gives an excellent idea of the bright character which is found in vocal or instrumental music when the *aubade* is performed. Other movements of drawing-room music are sufficiently explained by their titles. We need only add that marches are frequently in even or in 6—8 rhythm, but in mediaeval times were more generally written in 3–4 rhythm. Almost all of the above compositions (as already intimated) are in minuet or in song-form.

CHAPTER X.

CONTRAPUNTAL FORMS.

ALL music can be divided into three styles of composition,— monophony, homophony, and polyphony. *Monophony* is melody unsupported in any manner; all the voices or instruments joining in with the same notes; it is unison music, or at the most its progressions are in octaves. This was probably the music of the world from the earliest times until the Middle Ages; it is probable that the old Greek music was monophonic, and also the music of the ancient Romans. The early Christian songs were all given in this manner.

Homophony is the presentation of a single melody supported by chords, so that while the auditor perceives that many different notes are simultaneously present, he follows but one tune; it is harmonic music. It is singular that this species of music is the most modern expression of our art, and did not come into full existence, nor possess any definite laws, until the eighteenth century. Rameau, shortly after 1720, brought forth the first system which treated chords in support of the melody as an especial mode of composition; and it was as late as 1790 before Catel had evolved the first practical system of harmony.

In this connection we may state that many of the chords freely used to-day were unknown or prohibited to the masters of music as late as the sixteenth century. The chord of the dominant seventh was first brought into full use by Monteverde a little before 1600, and the same composer introduced the diminished seventh chord into musical progressions in 1608. The augmented fifth chord was introduced by Luca Marenzio in 1593.

Polyphony is the combination of different voices, each giving its own melody. It was the first skillful style of music used by the old composers. It was probably established not far from A.D. 1200. Briefly stated, homophony signifies harmony; polyphony signifies counterpoint.

Counterpoint may be summed up as the combination of different melodies into a pleasing unity, while it will be borne in mind that harmony gives prominence to but a single melody.

In the old expression of counterpoint the different melodies which were united proceeded in notes of equal length; the note then being called *punctum*. The art of combining the notes of these melodies received the Latin name of *punctum contra*

punctum, which was afterwards shortened into "contrapunctum," whence "counterpoint." The old music was almost entirely contrapuntal in its structure; melodies intertwined in these compositions much as the strands of a rope interweave, all going in one direction. In the harmonic structure, on the contrary, the use of chords against the melody is like the support of a bridge by columns. It was this difference of direction which caused Hauptmann to tersely describe the difference between the old contrapuntal style and the modern harmonic vein with the words, "of old, music was horizontal; nowadays it has become vertical."

The effect of a harmonic composition can be grasped usually at a single hearing; not so a fine contrapuntal work; its tones often interlace in such a complicated manner that the effect at first seems a meaningless tangle to the person uneducated in technical music. With repeated hearing, however, this tangle becomes unraveled, and one sees wonderful beauty of design where at first all seemed meaningless confusion.

Counterpoint, therefore, has one advantage over harmony. A beautiful composition in the harmonic style, as, for example, the "Habanera" in "Carmen," conveys all its charm at the first hearing; it cannot intensify its effect by repeated performance, but may possibly seem weaker at each repetition. A good contrapuntal composition, on the contrary, grows more and more interesting with repeated study. It is a case where familiarity by no means breeds contempt, but rather increased respect and affection.

Such a fugue as the one in E major, Book 2, No. 9, of Bach's "Well-tempered Clavichord" (see Music Volume ***, page 226), may not at first attract the average auditor; but a study into its devices shows the wonderful growth of great ideas from a simple and prosaic figure. The echoing of that figure from part to part cannot fail to charm the intelligent auditor after once he has mastered its design, nor will he ever so completely conquer this complexity that it will become threadbare, since counterpoint is the most intellectual expression of music, and a many-voiced fugal composition can scarcely ever be grasped in its entirety. Rousseau has maintained that no human mind can thoroughly follow more than two melodies at the same time. If this be true, then no man can entirely grasp the full scope of the combinations of the four or five voiced fugue *simultaneously*.

Counterpoint is generally less rhythmic than harmony. Were it not for the harmonic structure at present generally used in music, it is a question whether the need of the division of music into measures would have been strongly felt. Sometimes, as in certain canons, the bar-line is a hindrance to the comprehension of the composer's scheme rather than a help; for higher rhythm than the usual measure division — that of the phrase and its metre — is often the surest clue to the comprehension of the contrapuntal structure. As counterpoint generally demands less accent than harmony, the musical instrument which possesses no accents, the organ, assimilates well with this mode of musical treatment.

Among the melodies which constitute a contrapuntal composition, one is generally preëminent. This is called the *cantus firmus* or *plain song*. Although each part presents a melody, the *cantus firmus* will be found to be the theme from which the others are chiefly derived. Where there is a single part derived from the melody, it is called a *discantus*, implying that it owes its origin to the chief melody.

The different voices in a contrapuntal composition are often written in such a manner that they can be inverted at the will of the composer. If the parts are not susceptible of this inversion, the work is defined as being in *single* counterpoint. If two voices are so written that one can be placed above or below the other at will, the result is called "*double* counterpoint"; and this double counterpoint may occur at different intervals; thus, if the upper voice can transfer down an octave, the lower voice remaining stationary, or if the lower voice can transfer up an octave, the upper voice remaining stationary, or if both can simultaneously change places, the upper voice transferring down an octave and the lower voice up an octave, we speak of the music as being "double counterpoint in the octave." If the upper voice can transfer down a tenth, or the lower voice up a tenth, each crossing the other in this transference, the result is "double counterpoint in the tenth." The same transference at the interval of the twelfth leads to "double counterpoint at the twelfth." An examination of Bach's fugue in E minor, Book 1, No. 10, "Well-tempered Clavichord," reveals a fine example of double counterpoint in which the second page is derived wholly from the first by such inversion.

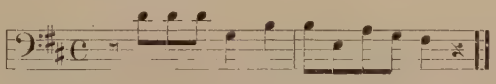
Nor is double counterpoint the only mode of inversion practiced in this field. Three melodies

can be so written that either of them may be transferred an octave up or down, crossing the others, and appearing in six different positions. This is called *triple counterpoint.* A still more complex problem can be worked out from four melodies by arranging each in such a manner that it can transfer up or down an octave, giving twenty-four different positions of the parts; this is *quadruple* counterpoint. The old masters of contrapuntal skill went even beyond this, and sometimes wrote five melodies in such a manner that each could move up or down an octave independently of the others, and in such *quintuple* counterpoint *one hundred and twenty different positions of the parts were possible! Quadruple* and *quintuple* counterpoint may be dismissed at once as merely abstruse problems; yet it is interesting to note how fond the old contrapuntists were of such complexities.

Nor were these problems utterly without use to modern music. The old composers were sturdy plowmen who prepared the field for the modern writers; and exactly as the old alchemist, in his search for the philosopher's stone, evolved the modern science of chemistry, the old pedantic musicians evolved many points in the science of music, for which the modern composer should be duly grateful. In ancient Greece the runners in the Olympic games trained for their races with leaden shoes upon their feet; quadruple and quintuple counterpoint and myriad-voice compositions were the leaden shoes of these ancient music runners. A few instances may suffice: Tallis, the English composer, once wrote a motette in *forty* parts; Benevoli, in 1628, achieved a composition in *fifty-four* parts; Valentini wrote a composition for twenty-four four-part choruses, *ninety-six parts in all!* In such pedantic composition the eye alone was appealed to, for in the performance the ear would hear only heavy harmonic masses of tone.

The above examples may serve to show that counterpoint is in some respects the mathematics of music. While modern composers would scarcely seek such extreme complexities, they frequently used the devices of double or triple counterpoint, or a dozen or sixteen real parts, in some of their works. The fugues of Bach are full of examples of intricate counterpoint. We have already cited a good example of double counterpoint. We can add to this a fine example of triple counterpoint as existing in Bach's fugue in C sharp major, Book 1, No. 3, "Well-tempered Clavichord."

Ancient writers frequently would use a single order of counterpoint throughout a composition, counterpoint of the "first order" existing where the melody and the counterpoint moved in notes of equal length. If the counterpoint gave two notes to each single note of the melody it was the "second order"; if four notes, the "third order"; and syncopated counterpoint was also employed. To-day all these orders are mingled, and "free" or "florid" counterpoint is the result. The invention of this mingled counterpoint is ascribed to Jean De Muris, who was doctor of theology at the Sorbonne in Paris in 1350. Many examples of double or triple counterpoint can be found by the reader in the two-part or three-part inventions of Bach, and the fugues teem with such effects.

The difficulty of following an intricate contrapuntal composition is greatly lessened by the imitation of figures; it is not too much to state that imitation is the very soul and life of counterpoint, and that it affords a clue to compositions which would otherwise be almost unintelligible to any save the most learned. The tracing of a simple figure through the different parts often glorifies even the most closely interwoven fugue. If the reader will study Bach's fugue in D major, "Well-tempered Clavichord," Book 2, No. 5, he will find the following figure in the first measures:

All the rest of the composition grows out of this figure; and one can follow the parts much more readily, because they represent this figure in various forms, than would have been possible if each part presented new subject matter.

But contrapuntal music presents other imitations than those of mere figures. One of the oldest and strictest forms of contrapuntal writing is made by the imitation of a melody throughout; this is called a *canon.*

CHAPTER XI.

CANON AND FUGUE.

THE word "canon" is derived from the Latin, and means "a rule"; it is the strictest expression of music, since one part exactly imitates the other; it is also the oldest expression of skillful music. A manuscript canon exists in the British Museum, which was probably written in the year 1215, and

shows a surprising state of musical development in England for such an early epoch. We give this canon in Music Volume ***, page 229.

In the early days such canons were called "fugues"; but the reader will readily perceive the difference between the two kinds of compositions after reading the succeeding chapter. A fugue may contain a canon, but a canon cannot be a fugue; a fugue is the contrapuntal development of certain figures, but a canon, being strict imitation throughout, precludes the possibility of that constantly changing treatment which we call "development"; therefore a canon can be only one phase of a fugue.

After the first voice has begun the melody of a canon, the second voice enters, imitating it strictly, and this may be followed by a third voice, etc. The second voice should not come at too long an interval of time after the beginning of the first voice; for in a canon the auditor is expected minutely to compare the two voices, and such comparison would be almost impossible if they were separated by a long time-distance.

Generally the imitating voice takes up the thread of the melody an octave above or below the first voice; this is called the "canon in the octave," and is most readily recognized, and the most pleasant to the ear; the large majority of canonic works are canons in the octave.

But the imitating voice may reproduce the melody at other intervals than at the octave, and canons exist at all intervals. A canon in the unison is one in which the melody is imitated on exactly the same degree as the first voice. These canons are little used, since the parts cross and recross each other so constantly that it is difficult to follow the separate voices. The "round" is a specimen of the "canon in the unison." A canon in the second is a canon in which the imitating voice reproduces the subject-melody a second above or below the first voice; a canon in the third would present the imitation a third above or below; the fourth, a fourth above or below, etc. The closest canon, therefore, would naturally be the canon in the unison; the widest practical canon would be in the double-octave or fifteenth, two octaves above or below the original subject.

Almost all single canons are two-voiced, but if a three- or four-voiced canon be written it is customary to use a combination of the above intervals; thus, the first imitating voice may enter at the octave; the second at the fifth, and so on. A canon may be merely a temporary effect in some larger work; thus, in the first movement of Beethoven's Fourth Symphony there is a temporary canon in the octave, and canonic touches are frequent in fugues and other contrapuntal compositions.

Most canons allow the imitating voice to enter a measure or two measures after the subject has begun, thus preserving the rhythmic accents of the melody in its imitation; but there are also exceptions to this rule, and the closest time-distance between the subject and its imitation would be a single beat.

In many canons a free part is added, which is merely an harmonic accompaniment or free counterpoint to the canonic voices. Many canons are written in song-forms as described in Chapter I. (see Music Volume ***, page 233).

If there be but a single melody in a canon, no matter how many voices imitate this subject, it is called a "single canon"; if two subjects are imitated by two or more voices, the canon is a double one; a "double canon" is, therefore, two canons going on at the same time (see Music Volume ***, page 235).

The free canon is where strictness of imitation is not constant, the composer changing a note here or there to obtain better musical effects; naturally the free canon is more elastic and often better-sounding than the strict canon, and it is much easier to compose (see Music Volume ***, page 237).

Other devices in canonic composition are numerous: thus the subject may be given upside down by the imitating voice, and a "canon in contrary motion" is the result; the subject may lead back to its beginning while the imitation is achieving the last notes, thus making the canon "endless"; the imitation may reproduce the subject in longer notes, thus resulting in a "canon in augmentation"; and other rarities of canon form also exist; one of these may be mentioned as a curiosity in music construction; it is the "crab canon" or "reversible canon"; in this the voices are so written that they make the same music whether played forward or backward, and the parts can be inverted, in double counterpoint, while playing them through backwards. Such canons might be regarded as mere curiosities of music were it not for the fact that modern composers sometimes enjoy introducing such learned effects into their works. Beethoven's great piano sonata, Op. 106, in the finale, a free fugue, introduces such a canon.

THE FUGUE.

The fugue may be called the flower of contrapuntal music. It is the perfection of logic in music; and although it differs very greatly in its presentation of contrapuntal development, it always grows, by the development process, out of the first figure or phrase of its composition.

One characteristic of the fugue is its ceaseless motion: here there are no full cadences, with pauses, as in the sonata or symphony; here there are no separated divisions clearly defined by double bars; but every voice seems to press on from its entrance to the very close of the work. The name, in some degree, reflects this ceaseless motion; for "fugue" is derived from "fugare," "to fly," and the word "fugue," therefore, means simply "a flight"; but the example of one voice flying before another is still more clearly presented in the canon than in the fugue, and it is not surprising, therefore, to find the early canons called "fugues."

Some of the large fugues present an exception to this continuous motion. Bach's "Saint Ann's" fugue, for example (the great organ fugue in E-flat major), divides clearly into three parts; but such divisions are the exception, and in the "Well-tempered Clavichord" all the fugues present the unified character described above.

A fugue is primarily founded on the relation of two voices, one of which answers the other; and the "subject" and "answer" represent in some degree the two tetrachords of the scale. The major scale of our music will be found to divide itself into two equal groups; thus, C, D, E, F, of our diatonic major scale are exactly duplicated in intervals by G, A, B, C of the last half of the scale. The subject and answer of a fugue bear a similar relationship to each other; what the subject presents in one part of the scale being responded to by the answer in the other.

The fugue may consist of two, three, four, or more voices. Bach's notable collection, the "Well-tempered Clavichord," presents fugues of two, three, four, and five voices; a larger number of voices would still be possible, but very complex. If the fugue presents but a single subject, answered or repeated by other voices, it is a "single fugue"; if two subjects should appear, answered or repeated by two or more voices, the result is a "double fugue." The chorus "Glory to His Name Forever," in Haydn's "Creation" is an example of double fugue.

Fugues are also sometimes classified by the formation of the answer. If the answer exactly imitates the subject on the dominant degree of the scale above or below, the fugue is called a "real fugue"; if alterations take place in the answer to establish the key of the tonic more clearly, the result is called a "tonal fugue," and the answer a "tonal answer."

Fugues are also classified by their modulations. If a fugue is written in the old church modes, which can be represented by the white piano keys of our diatonic scale, the result is called a "diatonic fugue"; on the other hand, if chromatics occur constantly in subject and answer, the result would be a "chromatic fugue."

The classification of fugues as "strict" and "free" is a vague one, but a strict fugue would be one in which all the rules hereinafter described are followed; most fugues, however, are too elastic to be subjected to very for malrule, and combine freedom of construction with great ingenuity. These are often spoken of as "free fugues," yet some of the most wonderful fugues in existence belong to this class. If all the formal rules were strictly applied, not one fugue in the "Well-tempered Clavichord" could truthfully be called "strict."

FORM OF THE FUGUE.

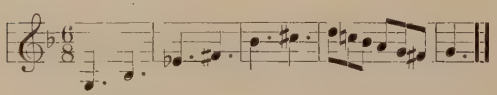
The following are the chief divisions of the fugue: — Division 1, Subject. Division 2, Answer. These two divisions often receive different names; in fact, the nomenclature of the fugue is one of the most mixed up matters in musical terminology. While we prefer the terms "subject" and "answer," we must state that some theorists constantly use the Latin words "dux" and "comes," "leader" and "companion," "antecedent" and "consequent," "theme" and "response," "guide" and "follower." The next division, "counter-subject," if free, is sometimes called the "counterpoint." The body of the fugue is made up of "episodes," "repercussions," or "strettos"; but this middle part is also spoken of as "devices," "digressions," and "working out."

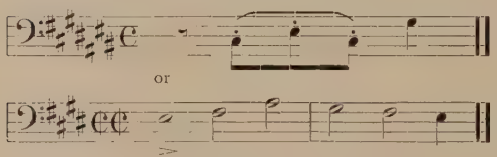
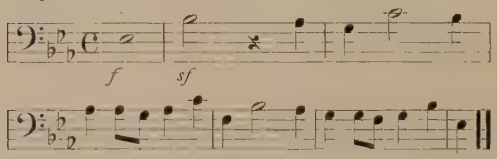
The final episode of the fugue is known as the "coda"; but different from the coda we find in preceding chapters, it does not stand separate from the form, but belongs to it.

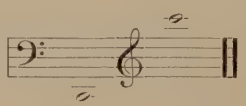
CHAPTER XII.

THE FUGAL EXPOSITION.

The subject is the figure or phrase that begins the fugue. It enters quite alone in the voice that begins the fugue, which voice may be any one of the two, three, four, or more voices that constitute the work. The subject is not to be regarded as a period, a melody, or a complete and independent division; it is rather, as intimated, a figure or phrase, leading directly into other divisions. The subject need not be attractive in itself; some fugal subjects are very prosaic, considered by themselves; thus Domenico Scarlatti once made the following fugal subject out of a few notes which his favorite cat accidentally struck as she jumped from his shoulder to the keyboard of the spinet and scampered away —



the only entrance of a cat into the field of instrumental music; and Bach has made splendid fugues out of such subjects as the following: —

But, on the other hand, there are many fugal subjects which are beautiful in themselves. In the seventh fugue of Book 2 of the "Well-tempered Clavichord" Bach uses the following attractive subject: —

This fugue was a great favorite with Mozart, who used almost the same subject in his overture to the "Magic Flute." In like manner we find Händel in "And with His Stripes," in "The Messiah," using the fugal subject of Bach's fugue No. 20 in the second book of the "Well-tempered Clavichord." It will be seen, therefore, that it is not held wrong for one composer to appropriate the fugal subject of another; indeed, the subject is so hampered with rules, in its construction, that it is almost impossible to invent a good fugue subject that has not already been employed by other composers; and since it is the working out of the subject, and not the subject itself, which is the glory of the fugue, there is no more suspicion of plagiarism attached to the using of another composer's subject than there would be to a clergyman's employment of some clerical brother's text.

The subject may indeed be regarded exactly as the text of a sermon, in that the musical discourse is almost entirely derived from it, and its successive treatments in strettos and repercussions are closely akin to, but often more ingenious than, the "fifthly," "sixthly," etc., of the ecclesiastical oration. Subjects should be narrow in compass, generally within an octave, in order that the voices may not cross each other too frequently and may remain clearly distinguishable during the entire fugue. This is so well adhered to by Bach, that the entire "Well-tempered Clavichord," one of the epoch-making works of history, the musical "Declaration of Independence," which declared that all keys were free and equal, the work which first broke the fetters of modulation and made the modern progressions possible, can be played upon a piano possessing only *four octaves*, the following compass:

As may be seen from the above statements, the subject may be very short, and it ought not to be long, since the clear comprehension of the fugue depends largely upon the clear comprehension and recognition of the subject. Cherubini, in his great work on "Counterpoint and Fugue," makes a charming bull by stating, "the subject should be neither too long nor too short"! If a long subject is found in some of Bach's organ fugues, it will be found to consist largely of scale-work and sequences, which facilitate its recognition. Beethoven sometimes broke the rule regarding length and compass of subject, but Beethoven's counterpoint is not to be compared with Bach's. When one examines a Beethoven fugue, one is astonished at the ingenuity displayed; but when one listens to a Bach fugue the ingenuity is often not perceptible, — an example of the art of concealing art!

Generally, but by no means always, the subject

ends at the point where the answer begins in the second voice. It would require a very long chapter to describe to the reader all the rules governing the construction of the subject, but the following chief means of identification may serve to enable him to recognize the length of the subject in different fugues: It may begin on any note and on any division of the measure; but it generally ends on an accented part of the measure and on the tonic, dominant, or mediant, — the mediant being the third note of the scale. It begins the fugue in the first voice; it enters alone in this voice. In a vocal fugue it represents a line or sentence of the poetry or prose that is used. It is imitated in full by the answer, and is repeated literally by the third voice that enters, if the fugue have more than two voices; it forms an intelligible phrase or figure; it is of decided tonality.

The voices enter one by one, giving subject and answer in alternation. Bach's fugue in C major, "Well-tempered Clavichord," No. 1, Book 1, is an exception to this rule, giving the following sequence, — Subject, Answer, Answer, Subject.

The Answer is the subject, stated with or without alteration, in the degree of the dominant, either above or below. If altered to preserve the tonality of the fugue more clearly, it is called a "tonal" answer. Sometimes the answer begins before the subject is finished; this is called a "close fugue." Fugue No. 9, in E major, Book 1, of the "Well-tempered Clavichord," is an example of this. Sometimes, on the contrary, the answer does not begin immediately with or after the last note of the subject; in this case the gap between the end of the one, and the entrance of the other, is filled by a figure or phrase called the "Codetta," or "Copula." (See Book 2, "Well-tempered Clavichord," fugue No. 12, F minor.)

The Counter-subject enters in the first voice after it has completed the subject (or codetta, if there be one), and it therefore becomes an accompaniment to the answer as it enters in the second voice. It is also a figure or phrase, not a complete melody; and both subject and counter-subject should be continuous, and not divisible into phrases or sections. In a strict fugue the counter-subject would follow the subject or answer in each voice except the last, thus forming an accompaniment to the voice next succeeding. After presenting subject or counter-subject, each voice would become temporarily "free," being no longer limited to a strict presentation of subject, answer, or counter-subject.

A schedule of such entrances, in a strict four-voiced fugue, which began with the bass, might be summed up thus:

Soprano				Answer
Alto			Subject	Counter subject
Tenor		Answer	Counter-subject	Free part
Bass	Subject	Counter-subject	Free Part	Free part

The above is a clear presentation of the relationship of the parts in the Bach fugue in E major, "Well-tempered Clavichord," Book 2, No. 9 (see Music Volume ***, page 226).

The above presentation of subject, answer, and counter-subject, in the different voices of the fugue at their first entrance, is called the "Exposition"; but it must be remembered that this is not a division which can be recognized by cadences or by melody, as in a song-form, or even a sonata, but flows on, without any pause, into the succeeding part of the fugue.

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Sometimes there is no regular counter-subject appearing in each voice. If the reader will apply the above schedule to Bach's Fugue in E flat, "Well-tempered Clavichord," Book 2, No. 7 (the subject of which has been given above), he will find the relationship of the parts as above mapped out, without a regular counter-subject; while the fugue in D major, same volume, No. 5 (subject given in the preceding chapter), presents the following order: —

Soprano			Subject	Free
Alto		Answer	Free	Free
Tenor	Subject	Free	Free	Free
Bass				Answer

the tenor here beginning the fugue. But an examination of the parts called "free" will reveal that they are derived from the last four notes of the subject, and that the entire fugue is evolved from the subject. The exposition of the Fughetta (see page 36) gives the following order: alto, tenor, bass, soprano.

Occasionally, in fugal writing, some voices entirely free may be added to those that constitute the fugue. The most admirable type of this combination is found in the union of a chorale (vocal) with an instrumental fugue as its accompaniment.

After the exposition all the parts are free temporarily, this forming what is generally called an "episode." This first episode leads to a cadence in the key of the dominant; but the cadence occasions no point of rest, for simultaneously with its occurrence one or more of the voices start out on

a new path ; each cadence in the fugue serves as the starting-point of some new division. Sometimes the first strict division after the exposition is a " counter-exposition," in which the order of the parts is reversed, answer beginning and being immediately followed by subject (see Fugue in E, Music Volume ***, page 226).

CHAPTER XIII.

THE REPERCUSSIONS, STRETTOS, AND CODA OF FUGUE.

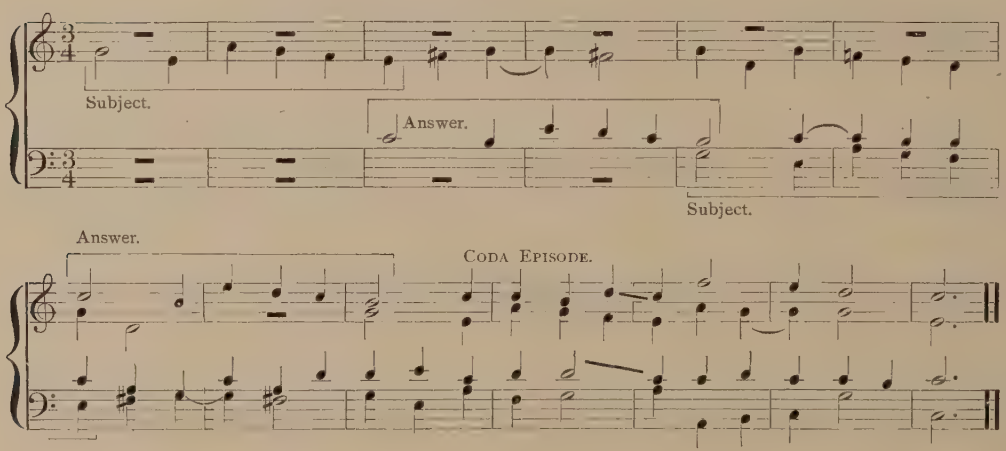
We have now had, in the exposition, a statement of all the subject-matter which is necessary for the evolution of the fugue, although the composer may introduce a new counter-subject, or a few other figures for development, if he sees fit ; but most fugues are logically derived from their text as found in the exposition. One may regard the figures and phrases found in the exposition as the bits of glass in a kaleidoscope, which form ever new designs by being combined in different manners, yet remain in themselves ever the same.

The treatment which now follows differs in a remarkable degree ; scarcely any two fugues present exactly the same method of evolution, yet three chief modes of treatment may be explained as omnipresent.

Episodes. — These are free passages which generally form connecting links between the stricter

FUGHETTA.

Weber's first composition, written when he was eleven years old.



parts of the fugue. Although they are called free, in a fine fugue they will be evolved from parts of the exposition.

Repercussions. — These are presentations of the subject and answer, or subject and counter-subject, in some new combination, sometimes in double counterpoint. But the characteristic of the repercussion is that the subject and answer do not overlap, but stand at the same time-distance from each other that they did in the exposition. If the reader will examine the tenth measure of the fugue in D, Bach's " Well-tempered Clavichord," Book 2, No. 5, he will find an instance of repercussion.

The Stretto. — This is the presentation of the subject and answer, or the subject and subject, or the answer and subject, and occasionally the answer and answer, in two or more voices, in such a manner that they overlap each other. Sometimes this is done with two voices only ; sometimes it is exhibited in all the voices; and in a strict fugue, in the final stretto, the counter-subject is interwoven with the subject and answer. All these treatments may be found in the musical example (Music Volume ***, page 226).

The episodes, then, may be considered the freest part of the fugue, the strettos its strictest. In a formal fugue, in the strict manner (our musical example is the nearest to this of all the fugues in the " Well-tempered Clavichord," but still stricter examples are to be found in the organ fugues and in

Bach's " Art of Fugue "), the episodes and strettos alternate. Such a fugue might be compared to a diamond necklace, the strettos being the gems, and the episodes the ornamented links which bind them together.

In the strict fugue the order of the modulations is definitely laid down (with a view to a good contrast of major and minor), and runs as follows: in major fugues, first episode to dominant key, second to relative minor, third to supertonic minor, fourth to mediant minor, after which the subdominant or the tonic key may be established. The minor fugue goes through the dominant minor, the relative major, the submediant major, etc. Scarcely any fugues, since Bach liberated the fugue from its formality, pursue exactly the prescribed path, but our musical example (Music Volume ***, page 226) comes close enough to it to demonstrate its feasibility.

The final stretto in the best fugues forms a climax to the work; and it is a fixed rule in fugal writing that no two strettos, or repercussions, or episodes, may be alike. The strettos, for there may be several, ought to follow each other in the order of their closeness, the one which overlaps most coming last.

After this stretto, or after the last repercussion of the fugue if there are no strettos, the final episode occurs; and as the fugue has been in ceaseless motion from the beginning, the idea of a chase is kept up by allowing the voices to slow up, as if the racers were fatigued; almost every fugue ends with a *ritardando* effect. The final episode in the key of the tonic is called (or miscalled) " Coda," but as it is not extraneous to the form it should receive some other name; " Coda-Episode " would be a clearer definition, although not a perfect one.

An organ point is often introduced (a single note sustained in the bass) in many fugues, near the end; but this is not essential to the form, and is omitted in many piano fugues, although it enhances the effect of an organ fugue, where it is generally present.

The many different ways in which fugues may be evolved may be most clearly illustrated by examining the " Well-tempered Clavichord." In that work the fugues, Book 1, Nos. 2, 12, 21, Book 2, No. 16, and a host of others, have no strettos whatever. On the other hand, the fugue in C major, Book 1, No. 1, has no episodes, but is entirely made up of strettos, seven occurring in succession; there is also an organ point in this fugue. The fugue in E minor, Book 1, No. 10, is without strettos, but is a marvelous display of double counterpoint, the first twenty measures being treated by inversion in the last half of the fugue, while the subject and counter-subject are frequently given in repercussion.

Book 2, No. 7, fugue in E flat major, presents a long subject (given in preceding chapter), which is three times made into a stretto for two voices only, each stretto being a charming canon; this fugue has no recognizable counter-subject, although a phrase is twice derived from the counterpoint which accompanies the first entrance of the answer; this is, however, not employed in the development of the fugue, being confined to the exposition. The fugue in C sharp major (sometimes printed in D flat major), Book 1, No. 3, contains some excellent examples of triple counterpoint. The fugue in Book 2, No. 3, in the same unusual key, is made up of very free treatment of four notes, a perfect " fantasie-fugue."

Among other applications of the fugal vein we may mention the *fughetta*, which is a short and free fugue, as the sonatina is a brief sonata in less strict construction. In its shortest guise the fughetta is merely an exposition with an episode and cadence. We present, in our musical selection (page 36), an example which was the first work published by Carl Maria von Weber, a rather remarkable Opus 1 for a child of eleven years. But the ordinary fughetta is rather larger than this, and presents at least one or two repercussions, but rarely a stretto. The chief theme of the overture to the " Magic Flute," up to its cadence in E flat, forms a fughetta.

Sometimes, also, the beginning of a fugue may occur in a musical composition, but, without cadencing, it may lead into some less formal mode of writing; such a temporary adoption of the fugue form is called " Fugato."

If a composition resembling a fugue were written, in which the answer, instead of appearing in the dominant, were to enter in the subdominant, the result would be called a " Fugue of Imitation."

Vocal fugues are generally less developed and shorter than instrumental, the organ fugues being usually the longest, strictest, and most ingeniously developed.

In the above presentation of the chief points of fugal form we have not spoken of the technical rules governing the formation of strettos, the laws connected with composition of counterpoint of the

various orders and varieties, for these matters concern the composer rather than the general musician or the musical amateur. The works of Prout, Higgs, Richter, Jadassohn, Cherubini, Bach's "Art of Fugue," and Boekelman's colored charts of fugues, are accessible to those who seek to enter more deeply into the technicalities of the subject; but for the purposes of mere analysis of the form, we trust that the preceding chapters will be found sufficient.

CHAPTER XIV.

THE VOCAL FORMS.

The vocal forms are very closely allied to the instrumental forms already explained. Although vocal compositions were the earliest forms of musical writing, the ecclesiastical works which were evolved in the early part of the Middle Ages were not definite in their shape, and had little influence upon the instrumental forms which followed; on the other hand, the vocal compositions of the sixteenth century were sometimes derived from the instrumental forms which were then beginning to arise in music.

The simplest form in music is the single period, and this is found frequently used in the oldest vocal forms; the oldest ballads were simply stories in song, and were intended to convey to the people such popular history as they were chiefly interested in. Many of these ballads were written in single periods of music. The next step in the evolution of vocal forms was a double period, in which the second period stood in contrast with the first. Some of the old ballads exhibited this form very clearly, and it was frequently used from about the year one thousand. We have already seen, from the musical selection connected with Rudolph of Hapsburg (page 7), that the three-division-form existed even in mediaeval times, but this was exceptional until toward the end of the Middle Ages; after that epoch the tripartite-form seems to have taken definite root, and the instrumental-form of three divisions may possibly have been derived from early vocal forms.

In modern vocal compositions we find the forms to be much freer than in instrumental work; this arises from the fact that the poem must be reflected in its musical setting, and often the words dictate a free form different from anything found in instrumental music. Yet very frequently this form exhibits the full three-division-style which we have already explained in connection with instrumental music, or any of the song-forms described in Chapter I. may be utilized by the vocal composer.

With the beginning of opera, 1592 to 1600, the vocal forms took on new life; at times they seemed closely akin to the instrumental styles, but often they assumed a very declamatory character which did not exist in instrumental music. It was Alesandro Scarlatti, who first gave a definite and large three-division-form to vocal expression; this was called "the aria-form." In the operas of this old composer we frequently find the following shape, which is very like the song-form with trio, explained in Chapter I., and is larger in its dimensions than the three-division song-form:

Division 1. — A theme, period, or complete song-form, ending in the key of the tonic.

Division 2. — Another theme, or song-form, in strong contrast with the first, exactly as the trio was in contrast with the first song-form in the minuet-form of Chapter I. This second part was contrasted in style, tempo, and key with the first division.

After this second division there followed a full and literal repeat of the first division; it was not written out, but indicated by the mark "D.C.," whence the form was known as the "da capo aria." This form was frequently used by Bach and Händel, and may be found in the "Messiah," the "Passion Music," and other works of these composers. It has the defect of too much repetition, a fault which can scarcely be forgiven in modern days, where nearly all repetition is avoided.

The first improvement upon this form was made by the writing out of the third division; now, instead of a literal repeat, a varied return of the chief theme might be made; division 1 might end in some other key than the tonic, and on its return it would be altered to cadence in the tonic key; other variations might occur, and the monotony of the literal repeat would be entirely avoided.

An example of the literal "da capo aria" may be found in "He was Despised" in Händel's "Messiah"; an example of the varied return is found in "Rejoice Greatly" in the same oratorio.

Modern composers have improved upon these forms by causing Division 3 to be an abbreviated return of Division 1; thus the three-division-form is preserved, the double contrast is made, yet the boredom of complete repetition is avoided. An example of such abbreviated repeat may be found

SINGING BOYS.

By Franz Hal.

in "It is enough," in Mendelssohn's "Elijah," or in "O God Have Mercy," in the same composer's "St. Paul."

Sometimes a freer aria was used by the old composers, which was not in the three-division-form. Most frequently this will be found to present two large divisions (bipartite), in contrast with each other. Mendelssohn's "Hear Ye Israel," and Händel's "I Know That My Redeemer Liveth" represent this style.

The "cavatina" in vocal music is a simple melody, full of expression, but without ornamentation or embellishment. "Home Sweet Home," if introduced in an opera, would be called a "cavatina"; "The Last Rose of Summer," as used in the opera of "Martha," is another example.

Another important style of vocal music is found in the recitative. This is of two kinds: First, the "free recitative," which is a species of vocal declamation, without tempo and with very little accompaniment. In Italian this is called *recitativo secco*. This recitative is sparsely accompanied by a few chords. Its chief charm is in the free declamation of the singer and the bold modulations of the accompaniment.

Another species of recitative is the so-called "measured recitative," or in Italian, "*recitativo misurato*" or "*recitativo stromentato*." This recitative is in strict tempo, and is melodic like a song, but is too incomplete to form a period; it generally presents a melodic phrase only.

These two kinds of recitatives are freely intermingled in vocal work; and the vocal part at the end of such composition frequently concludes upon the dominant note, the accompaniment adding the final cadence which brings the division to a conclusion.

The above three styles of vocal composition —"recitative," "cavatina," and "aria"—are often united to form the largest vocal solo, the operatic "scene," or "*scena*."

Sometimes such a scene forms a division of an opera, as the "mad scene" in "Lucia," or the "prayer-scene" in "Der Freischütz." At other times the *scena* may be an independent vocal composition, as is the case with Beethoven's "Ah Perfido," or Mendelssohn's "Infelice."

In such an operatic scene three kinds of singing are presented: the recitative portrays the declamatory power of the singer; the cavatina is an exhibition of the expression and quality of tone; the final aria is generally full of technical display and brilliancy. Such an aria is called an "Aria Di Bravura" or a "Coloratur Aria"; it is generally in the "two-division-form" rather than in the set "aria-form" of three divisions.

The order of the parts in such a *scena* may vary: the cavatina may be preceded or followed by a recitative; sometimes, as in "Batti, Batti," from Mozart's "Don Giovanni," a short aria may begin the *scena*, but a brilliant aria almost invariably ends it.

The free recitative in such an aria, even in an opera or oratorio, may be accompanied by piano alone, as, for example, the recitatives in "Don Giovanni," or in the "Marriage of Figaro."

The "prayer-scene" in Weber's "Der Freischütz" affords a good example of the intermingling of the two kinds of recitatives with a cavatina.

Another vocal form more often found in the old than in the modern scores is the "vocal rondo." This is generally in the second rondo-form, explained in the preceding chapter (an instrumental example of which will be found in Music Volume ***, page 214); but its last division, the final appearance of the chief theme, is frequently embellished and led to a climax in order that the singer may win a personal triumph. Gluck's famous song, "I Have Lost My Euridice," is a good example of this rondo-form. In Music Volume **, page 438, will be found an illustration, by Purcell, of this form in its strictest guise, without elaboration of the final appearance of the theme.

We have already stated that many vocal forms are entirely free because of the exigencies of the poem, but the influence of the old style of repetition is still found in the so-called "strophe-form" of much drawing-room music.

The "strophe-form" is rather a style than a form, since its melody may present anything from a period to a three-division-form. It consists of music composed to a single stanza of the poem, which is repeated to each subsequent stanza. Almost all drawing-room ballads present this style. It has two points of weakness: firstly, if the poem be a long one, the many repeats of the melody are apt to cause monotony; secondly, if the poem be changeable in character the music will by no means represent its variations of emotion.

Very frequently in the performance of these "strophe-forms" the auditor is apt to accept the expression given by the singer for the expression of the music itself; certain songs, which are regarded as the acme of musical expression, scarcely

bear the test of critical analysis in this regard. If we examine Hullah's famous "Three Fishers" as a prominent example of "strophe-form," we find its beautiful music occasionally straying from the spirit of the words. The three verses of Kingsley's poem present three contrasted pictures: the music portrays the words of the second stanza perfectly; the thought of the third stanza passably; but the first stanza not at all. If we examine the line, "Each thought of the woman who loved him the best," we find in the music a dissonance which in the succeeding stanzas pictures the coming storm, or the anguish of the widows; it surely could not properly present all three of these dissimilar emotions!

If a poem is short, and all of its stanzas represent the same emotion, the strophe-form may be fittingly employed. Schubert and Robert Franz have very effectively used this form in some of their famous songs. If the student will examine the first song of Schubert's "Maid of the Mill" cycle, entitled "Das Wandern," he will find five

MARRIAGE OF FIGARO.

Reproduced from painting by Carl Becker.

stanzas, each representing activity and the bustle of life; in such a poem the strophe-form finds its fittest employment. Schubert's famous song, "Impatience," is another example of one emotion carried through many verses; in this song each stanza is full of impatience and restlessness, and the same music may most appropriately picture every verse.

It often happens in the construction of poetry that several stanzas picture a single emotion, while the final stanza affords a sudden change of sentiment in startling contrast. Such a topic could be treated in strophe-form until its last stanza, when a change of music would be necessitated.

Often a poem is too free and varied to submit to any such treatment as that described above; in such a case the music must present a free form, changing constantly with the changes of sentiment presented in the poem. This mode of treatment is called the "art-song;" the Germans give it the graphic name of "Durchcomponirung,"

or "through-composition." An "art-song" presents no fixed form, or, rather, its form is as free and changeable as the poem which it portrays.

Sometimes the two forms intermingle; for in a long poem we might find certain sets of stanzas depicting a single emotion, which stanzas might be set in strophe-form, while the first change of emotion would send the composer into the freer field of composition known as the "art-song."

It is a pity that many composers do not recognize the mastery of poetry over the music which accompanies it. Wagner has made it one of his chief theories that music should truly portray the emotions of the words to which it is attached. When we hear words of deepest anguish or of anger repeated in the most melodic music, in the sextet of "Lucia," or the weeping of the anguished mother given in the most brilliant and spirited manner, in Rossini's "Cujus Animam," we can understand that music may occasionally be a falsehood. To illustrate this further, we may be permitted to quote Kingsley's poem: —

"When all the world is young, lad,
And all the trees are green,
And every goose a swan, lad,
And every lass a queen;
Then hey for boot and horse, lad,
And round the world away;
Young blood must have its course, lad,
And every dog his day.

"When all the world is old, lad,
And all the trees are brown;
And all the sport is stale, lad,
And all the wheels run down:
Creep home, and take your place there,
The spent and maimed among;
God grant you find one face there
You loved when all was young."

There probably never was a more definite presentation of major and minor in poetry than the above two verses; yet almost every musical setting that we have seen of the above verses uses the same music for each, — the "strophe-form"!

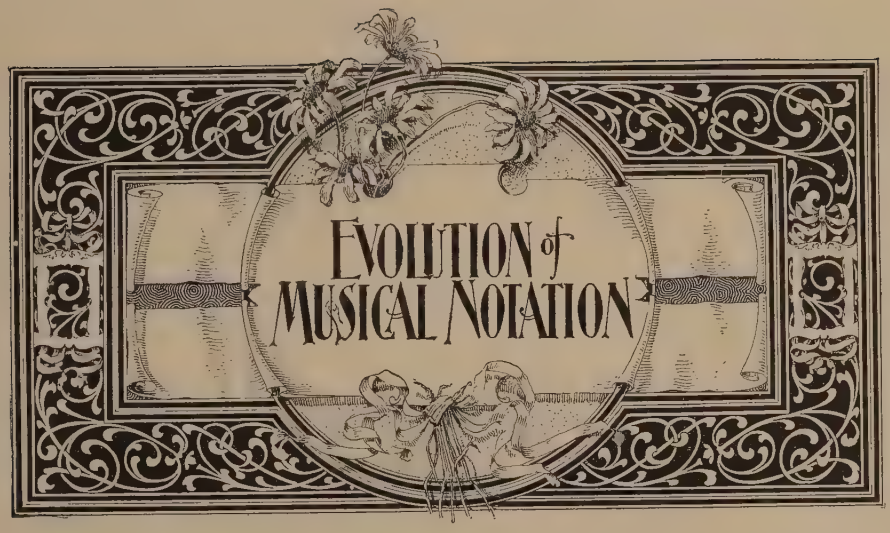
In this connection we may quote the indictment against such musical composition made by Herbert Spencer in his essay on "Education"; — "They are compositions which science would forbid. They sin against science by setting to music ideas that are not emotional enough to prompt musical expression; and they also sin against science by using musical phrases that have no natural relation to the ideas expressed, even where these are emotional. They are bad because they are untrue; and to say that they are untrue is to say that they are unscientific."

It may be all summed up in a single phrase, voicing the Wagnerian theory already quoted; the great operatic composer has defined the union of poetry and music in many sentences: "In the wedding of these two arts poetry is the man, music the woman; poetry must lead, music must follow;" "Music is the handmaid of poetry"; but in no sentence is this summed up so thoroughly as in Wagner's greatest three words, "*Music is truth.*"

Louis C Elson

TERPSICHORE. *By Schuttenberger.*

MUSIC BY COOMANS.

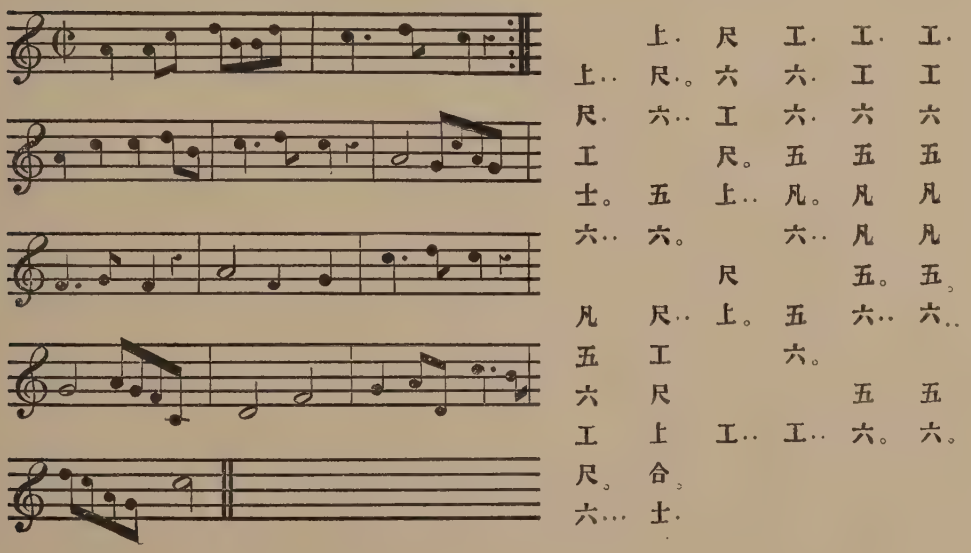

EVOLUTION of
MUSICAL NOTATION

THE EVOLUTION OF MUSICAL NOTATION

By LOUIS C. ELSON

IN the Middle Ages it was customary for every scholar to write his works in Latin; and this language was understood by every student in England, France, Germany, Italy, etc. At the present time English is probably read and spoken in more countries than any other language; yet no language has ever been so universally understood and interpreted as the written signs of notation. Like all other languages, we find notation to be a gradual growth, not invented by any one man, or in any single epoch. In the earliest days the transmission of music was entirely oral, and even to-day the music of certain Oriental nations is perpetuated by unwritten tradition.

Among the earliest nations which reduced music

SONG CALLED 鮮花 (THE FRESH BEAUTIFUL FLOWER).

SPECIMEN OF CHINESE NOTATION.

to a written system, was China, and the hieroglyphs which are used to represent the syllables of that language were also employed to represent the tones of music. We find this primitive notation used in China four thousand years ago, and possibly its invention was much anterior to this epoch. The application of this written system is ascribed to Fo Hi, a semi-mythical character whose adventures transcribed in Chinese literature are so similar to a scriptural personage that many commentators have supposed him to be the Noah of the Bible.

The first traces of our own alphabetic notation are found in ancient Greece, as early as 600 B.C.

The Grecians employed the letters of the alphabet to signify certain sounds. The first eight letters only were employed, and the minor scale, which was probably the chief scale of the ancient world, began with the first letter of the alphabet. Before this time Pythagoras had employed a primitive notation, probably borrowed from the Egyptians, in which the signs of the zodiac were used; but this was found too clumsy for ordinary use, and the alphabetical letters were substituted. The early Grecians thought of their musical scale as running downward rather than upward, and this circumstance was for years a puzzle to the commentators upon Greek music. When a Greek spoke of the highest tone he referred to the longest string of the harp; therefore the tone which he would call the "lowest" meant the shortest string, i.e., the highest note.

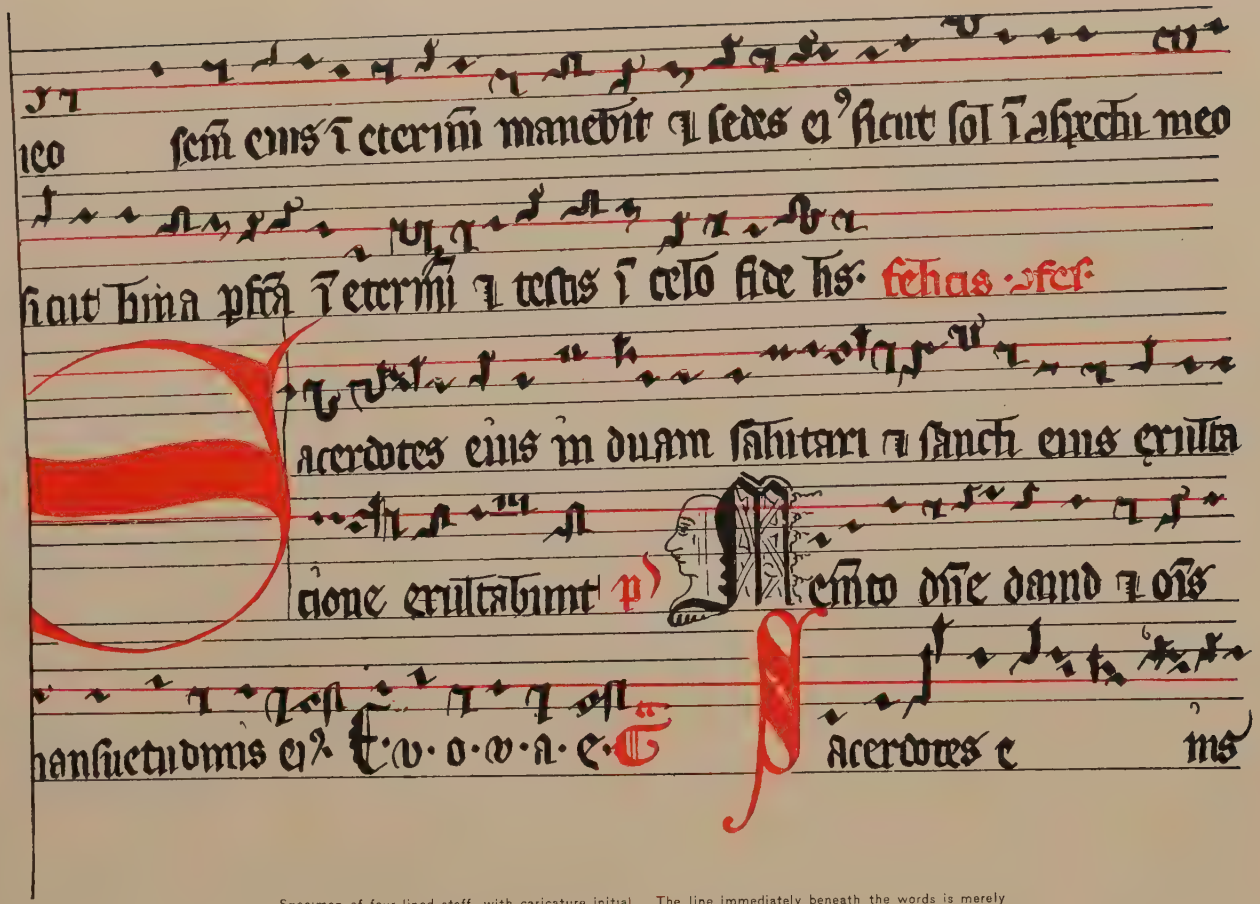
It is one of the surest proofs of the simplicity of ancient Greek music that the notation founded upon simple letters was not deemed inadequate. In every great advance in the composition of music we find the change reflected by some change in notation; and the fact that the old Hellenic writers were satisfied with so crude a notation proves that music had not at that time advanced far beyond mere melody. When the chromatics entered into music the notation was slightly altered; and the letters were placed sideways or upside down, and sometimes fragments of letters were used to indicate a change of pitch of the original note. Modern commentators have been somewhat hampered in their studies of Greek music by the fact that so few specimens have come down to our own time. Until very recently three palimpsests, discovered by Vincenzo Galileo, the father of the great astronomer, have been the only specimens for the study of the system of ancient Greek musical notation; but luckily a hymn to Apollo has since been discovered at Delphi, engraved on marble, and it is possible that this composition may lead to a more clear understanding of what the ancient Greek music actually was. How vague the subject is at present may be judged from the fact that some commentators believe the Greek notation to have had (with chromatics) 1620 signs; others give it 990, and still others but 90 signs. It may however be taken as a probability that the Greeks had no harmony; their music was pure melody, chiefly in a minor mode, and was of simplest construction.

It may be somewhat hazardous to attempt a more definite judgment as to the Hellenic music; but there are certain indices which seem to show a similarity between the Scottish folk-music, largely melodic, without harmony, and written in different scale forms, and the music of ancient Greece. It is even possible that the drone-bass which we associate with the bagpipe was used in supporting the tunes of the old Grecians; for in Greece and in Italy there exist to-day certain bagpipes which are called "Zumpogna," a word evidently derived from the old "Sumphonia," which the Greeks applied to combined music.

The Romans seem to have copied their musical notation from the Greeks, and much of the early Roman system was built upon a succession of alphabetical letters; but we find the art gradually decaying in ancient Rome. Imperial Rome might conquer the more cultivated nations, but could never assimilate their artistic progress. Even the idea of the octave seems to have been imperfectly understood among the Romans; and they began their scale with A, and ran it along the alphabet as far as Q, R, and S, through a lack of comprehension of the repetition of notes in higher pitch. It was quite natural that this should be so, since no art can flourish in slavery, and the chief musicians of ancient Rome were cultivated Greeks bought in the slave-market, or Gaditanian singers imported from Spain to charm the public in the theater.

Few musical treatises have come down to us from the ancient world. Quintilian has given perhaps the clearest account of the old Greek music; Vitruvius has left us an account of the ancient musical organs which is extremely tantalizing because of its vagueness. Boëthius, sometimes called "the last of the Romans," has left us probably the clearest account at present obtainable of ancient music and notation. He lived just before the downfall of the "Western Empire," and was probably put to death by Theodoric, the Goth, in A.D. 525. He has been regarded, on quite insufficient evidence, as a Christian who suffered martyrdom; hence the monks took especial delight in conserving and translating his writings. His influence upon the mediæval musical system was bad, for he perpetuated the complexities of Greek notation and nomenclature, which he probably understood but imperfectly, since, at the time that he wrote, Rome had fallen far behind the musical culture of ancient Greece.

With the rise of the Christian church music received a new impetus, and even from the second



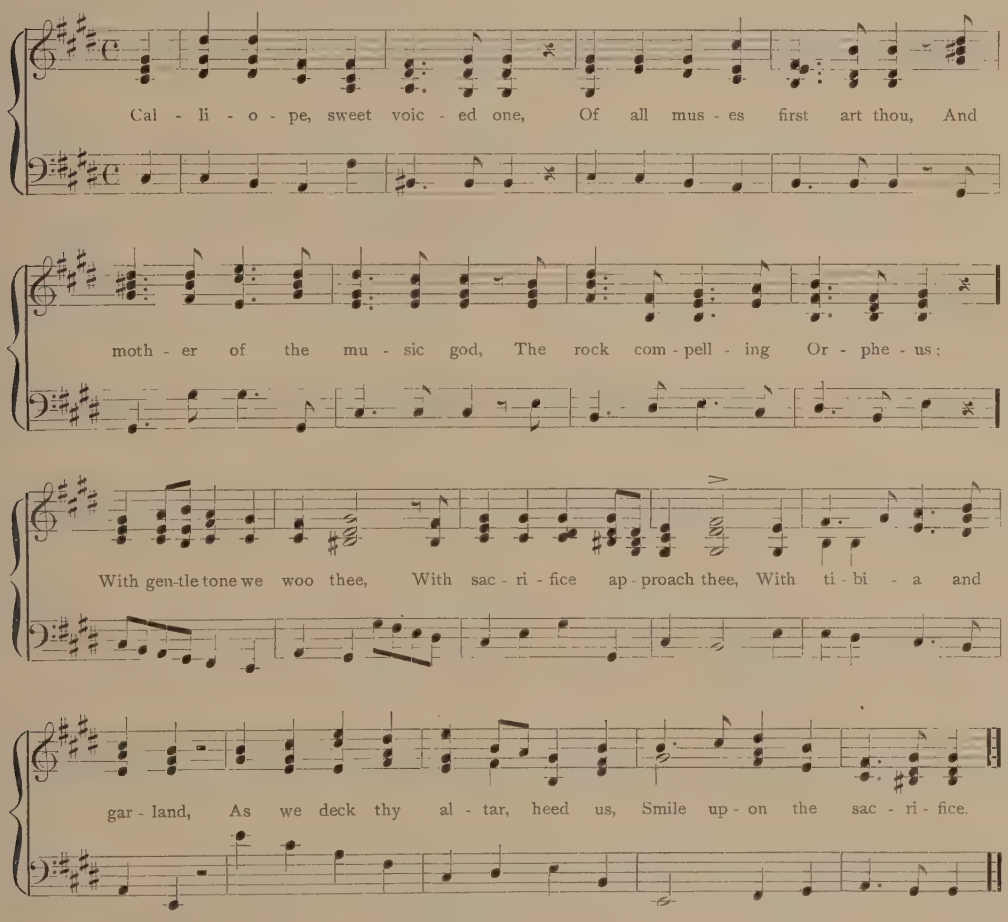
Specimen of four-lined staff, with caricature initial. The line immediately beneath the words is merely a ruled guide for the letters, and is not connected with the staff.

century we find many teachers at work evolving a system of religious music. With the increased musical activity a new notation was bound to appear, and before the fall of Rome we discover a system of notation which must be identified with the early Christian music.

This system was called the *neumae*, the word meaning "a breath" or "breath-mark" in the old Greek. In the *neumae* notation, we find the first appeal being made to the eye of the music-reader. The lines and dots, which were placed directly over each syllable of the music to be sung

HYMN TO CALLIOPE.

From the Library of Cardinal St. Angelo, Rome (Palimpsest).



The above melody has been harmonized by Macfarren. In its ancient state it was probably sung in unison

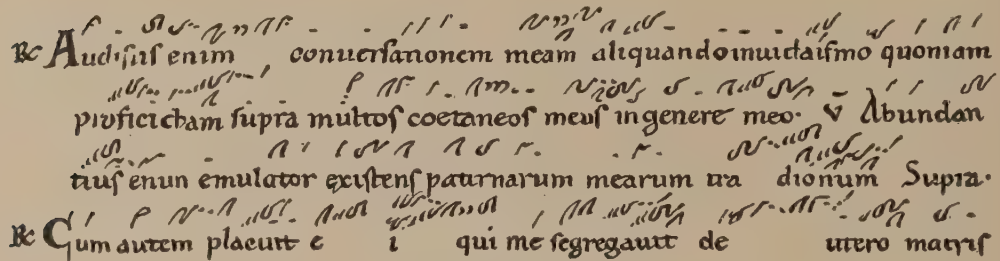
indicated the rise and fall of the voice; and while they could not give the exact pitch to the singer, these neumes served excellently to show the direction in which the voice should go.

But such memory marks could only serve to guide the singer who had learned the original melody from some other person; in themselves they meant nothing; there was, in short, no system of notation in existence which could guide anyone to read a melody directly from the page, without having learned it orally beforehand; the neumes were merely aids to the memorization of music.

It is possible that the early Christians derived them from the following accent and inflection-marks found in Hebrew scripture-rolls.

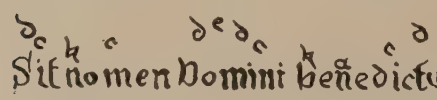
Nor were these neumes written on a single system; almost every teacher evolved his own set of signs by which he riveted his melodies on the memories of his pupils. Some forty different systems of neume notation existed during the Middle Ages; yet, when Gregory the Great gathered his church chants into books, the only notation possible to him was this imperfect set of memory-signs. How superficial such a notation was may be gathered from the fact that when Romanus carried an authentic copy of Gregory's music from Rome to St. Gallen he found it necessary to affix explanations to the notation. This was in the year 790.

It must not be supposed that the neumes utterly abolished the letter system which we have described as arising in ancient Greece; in fact, letter notation existed until late in the Middle Ages. Odo



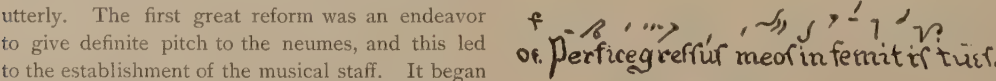
SPECIMEN OF NEUMES.

of Cluny is credited with having used these letters in connection with the major scale, beginning with the first letter of the alphabet, which had before this time been used to represent the first note of the minor scale. We append an example of the old letter notation.



It must be evident to every reader that so primitive a system could not exist after counterpoint was invented; the letter notation might be employed for purely melodic structure, but in the effort to represent concerted music it would fail utterly. The first great reform was an endeavor to give definite pitch to the neumes, and this led to the establishment of the musical staff. It began in a very primitive manner; a single line drawn through the neumes represented the pitch of small F; everything above this line was sung above F, everything underneath it below that note. With this simple reform the staff and scale began. The F clef, now the bass clef, was, therefore, the earliest of all signs of definite pitch; and the reason that this note was chosen in preference to others was because it is a medium note in the average male voice (baritone) and all the church singers were males.

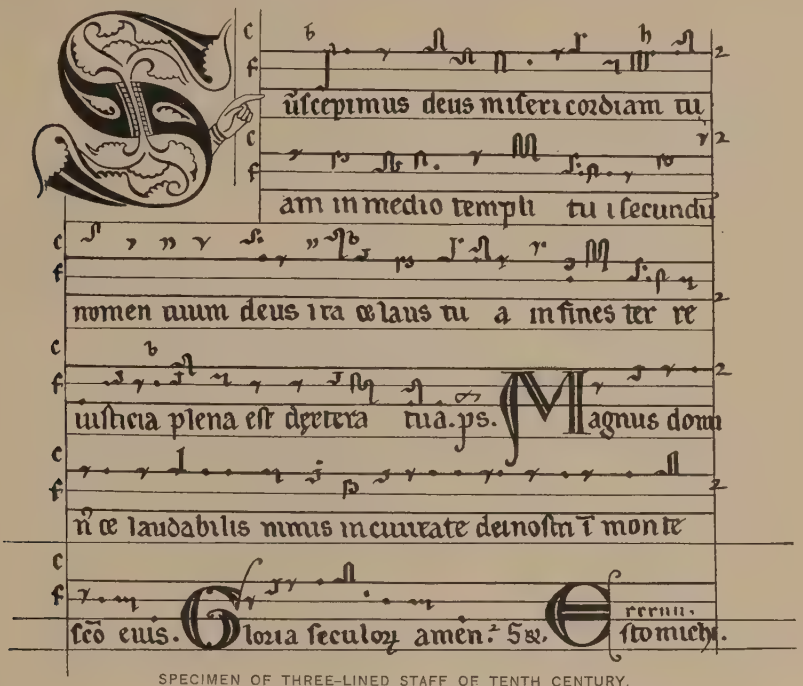
The leaven was now in the meal. The letter F had begun the staff, and very soon another line was added to the single one which repeated the pitch. We now find the F line colored red; and the second line, which represented C, was either yellow or green. Progress was now comparatively easy. A third line, this time black, was added between the two, and this line was named "A." With the next step, the addition of the fourth line, it was found unnecessary to mark the pitch of each



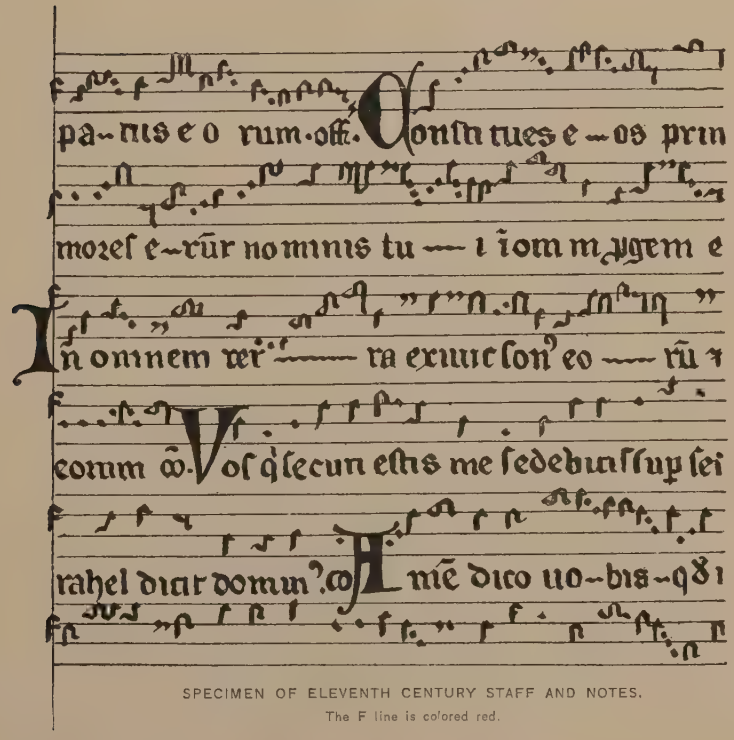
SPECIMEN OF NEUMES. (About A.D. 900).

line, and the F line only was marked. In short, we have now arrived at the period where the four-line staff with the F clef was established.

Evidently the ancients thought one could not have too much of a good thing; and we find in

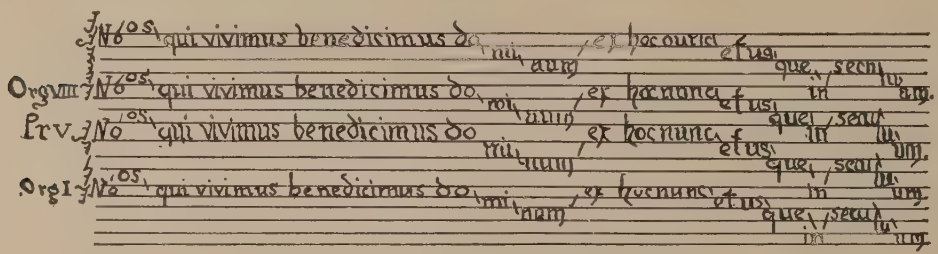


SPECIMEN OF THREE-LINED STAFF OF TENTH CENTURY.
The C line green, F and A line red.



SPECIMEN OF ELEVENTH CENTURY STAFF AND NOTES.
The F line is colored red.

the tenth century Hucbald, a monk of St. Amand, in Flanders, turning from the four-line system, and using a staff of many lines. This was rendered necessary by the fact that a rough kind of part-music had begun, and the four-line staff was now inadequate to represent the harmony which was required. A strange and weird harmony it was, in which the parts moved in an endless succession of fifths and fourths. It was called the "organum," from the fact that it was first used on the organ in accompanying voices. The organ, which had been used in ancient Rome, had disappeared only to reappear in the reign of King Pepin and the Emperor Charlemagne, in a very crude state. Alcuin, the historian of the court of Charlemagne, gives an account of an organ which was sent to the French court from the Orient, and describes its powerful tone, its clumsy bellows, its simple rods attached to each pipe instead of keys, with some degree of minuteness. He tells us that a French lady, upon hearing this instrument played, went crazy, which is, after all, not to be wondered at. But out of this crude instrument there grew the part-music which we present below, which, rude as it may appear to our ears, was yet an advance upon the endless unison work which had preceded it.



SPECIMEN OF MANY-LINED STAFF. TENTH CENTURY.

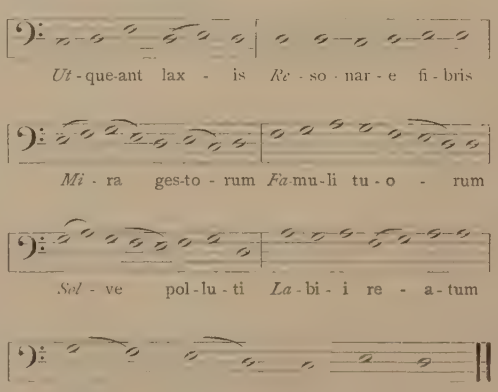
Hucbald made several other improvements in the art of notation. Sometimes he marked the commencement of each line with a Greek letter, denoting its pitch, instead of using the character denoting intervals between the lines; and in some of his latest manuscripts he used dots and lines, which, for the first time in history, indicated in some degree the length of the notes. He seems to have used only the spaces between his lines. By one of the odd revulsions which are often found in this epoch of musical development, a successor discarded the spaces, and used the lines only in the many-lined staff. A combination of both seems not to have occurred to any of the composers of the tenth century.

Up to this time all music required something of oral instruction before it could be read from the written manuscript. Sight-singing did not exist. This great advance in music is due to a most practical vocal teacher, Guido of Arezzo, called thus from the town in which he was born. Guido was a Benedictine monk in Pomposa, between the years 1023 and 1036; and he must, therefore, have been born not very far from A.D. 1000. He seems to have been a rather quarrelsome, imperious, and eccentric character; but he was, above all, a practical musician, and he knew how to seize upon such points as might aid him in teaching singing in the unwieldy musical notation of his time.

Guido found, among the hymns which he taught to his pupils, a musical invocation to Saint John, patron saint of singers. He noticed that in this hymn each line began with a different syllable, and each musical phrase began one degree higher than its predecessor. The music of this hymn was as follows:

HYMN TO ST. JOHN.

Rewritten in modern notation.



The Latin words may be thus translated: —

"That thy servants may be able
To sing the praise of thy wondrous deeds
With all their strength,
Cleanse their lips from all stain of sin."

Guido saw his opportunity. He caused the syllable which began each line to represent to his student the musical note which began the phrase, and through this association of ideas the greater part of the modern vocal scale was formed. It may, however, be noticed in the scale which is above given, that the seventh note is not present. The scale of Guido's time was hexachordal, consisting of six, and not of seven notes. As it has been doubted by some skeptics whether such words as these which gave rise to the vocal syllables were actually used in a hymn to Saint John, we may be permitted here to reproduce them from an old missal of the thirteenth century, now in the possession of the writer of this article. The *melody*, however, in this selection is not the same as that which gave rise to the succession of scale tones.

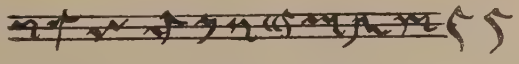
The first scale, therefore, ran as follows: "ut, re, mi, fa, sol, la, ut." It may be mentioned here that the French have never changed this succession, and still use "ut" as the first note of the scale; but in vocal work "ut" demanded too closed a vowel for effective singing, and in Italy was afterwards changed to "do"; this improvement is ascribed to G. B. Doni, who died in 1669. When the seventh tone was added to the scale the Italians and French gave another syllable to the six already written, and called it "si," the addition being made as recently as the seventeenth century. The scale, therefore, in Italy became "do, re, mi, fa, sol, la, si, do"; in France it remained "ut, re, mi, fa, sol, la, si, ut." It may be passingly mentioned that in Italy and France these syllables took such deep root that they replaced the alphabetical letters which before this had represented the notes, and became the *only* names of the degrees of the scale. To-day, for example, in France a sonata in C would be called "Sonate in ut"; and in Italy it would be called "Sonata in do."

With Guido's naming of these syllables, and causing each of them to represent a definite tone, *sight-singing began!* Our monastic music-teacher seems to have been not very highly cherished in his own monastery, and we find his brethren quite happy when he was called to Rome with his new musical invention. In Rome the pope and all the nobility were astounded to find that music could be read from the manuscript without previously having been taught by a vocal teacher. The fame of the new invention spread far and wide, and Guido suddenly became a great celebrity. With the exaggeration of the times he was called "the inventor of music," and almost every new discovery in the tonal art was ascribed to him.

There was so much of hero worship at this time that it is almost impossible to separate the real from the mythical as regards Guido. There is little doubt that he added to the notation of Hucbald, and threw his influence against the vagueness of the neumes; he also seems to have worked heartily for the establishment of the staff-system. How far this was advanced at this epoch may be shown by the musical examples which are added to this article. It was possibly Guido who hit upon the idea of using the lines as well as the spaces of the musical staff; and it is very possible that he caused the three-line staff, with its yellow, black and red line, to develop into four lines; but in all of Guido's notation we find no trace of notes of definite length.

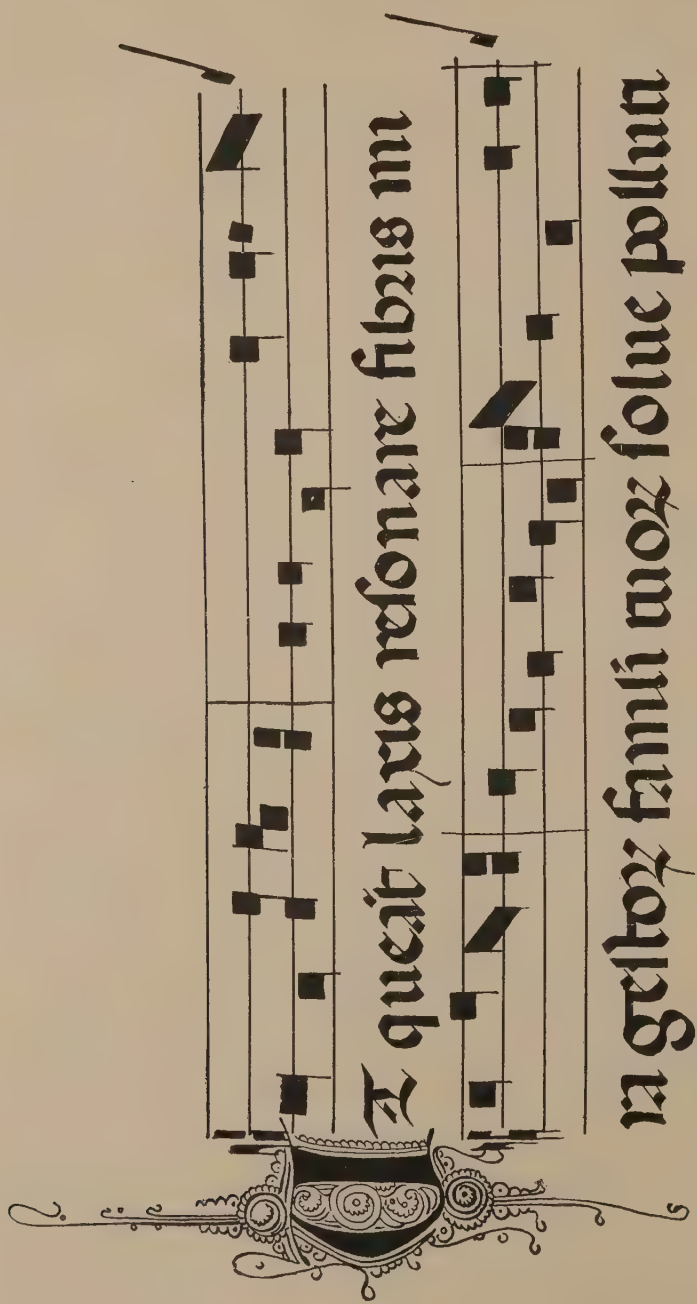
Nevertheless, with the improvements which Guido had added to the old notation we find written music becoming for the first time a fixed science with definite meaning. Naturally such a notation abolished the old letter system which we have described as beginning among the ancient Greeks, but it seems to have died very hard; as late as the fifteenth century we find manuscripts with a notation which consisted of the first letters of the alphabet.

Guido's practical notation gradually developed itself into a more intricate series of signs. From the adjoined specimen it will be seen that some of the old notations resemble nothing so much as the footprints of a fly which had just emerged from an ink-bottle. The name given such notation indicates that our forefathers noticed the resemblance: they called it "*pedes muscarum*," — "the fly-track" notation.



Guido had undoubtedly anticipated the use of the staff and of the modern scales, but had probably never dreamed of notes of definite length. The next great reform in notation was the giving of absolute length to the signs which represented notes.

The invention of notes which should represent

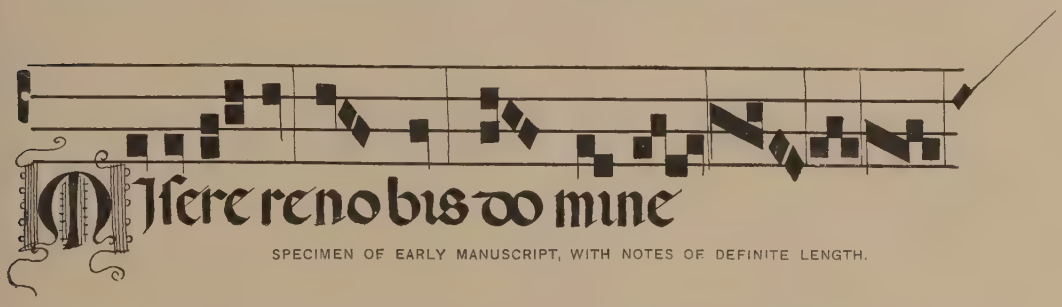


WORDS OF THE OLD HYMN TO ST. JOHN.

From a 13th century manuscript in the library of Louis C. Elson.

length has been ascribed to different personages; it is very possible that the invention took place simultaneously in Belgium and in England. In continental Europe we find Franco of Cologne receiving the credit of this great improvement, while in England Walter Odington, a monk of Evesham, in Worcestershire, who existed in the thirteenth century, has been hailed as the founder of this system. It is very possible that both of these men simultaneously hit upon the reform which was to establish modern notation. Franco's manuscript (still in existence) was the first practical treatise written on the subject of musical notation; it was called "*Ars cantus mensurabilis*." Walter Odington was not far behindhand with his manuscript (still preserved at Cambridge in England), in which may be found the first traces of the five-line staff, and also the length-notes which are so generally ascribed to Franco of Cologne. We append the notes which form the basis of both systems.

At this time the semi-brevis seems to have been the shortest note allowable in musical notation; but very soon the shorter note, called the "minima," "the smallest," was added to the list.



SPECIMEN OF EARLY MANUSCRIPT, WITH NOTES OF DEFINITE LENGTH.

Franco of Cologne seems to have invented rules by which notes could be made perfect or imperfect, an evident anticipation of plain and of dotted notes, and an invention which permitted the musician to use even or triple rhythm at pleasure. The perfect rhythm (*perfectum*) consisted of notes each of which was held to be worth three smaller notes, — practically a dotted half-note; and as this three-in-one suggested the *Trinity*, the triple rhythm was held to be the purest and the most adapted to religious use.

At about the beginning of the fourteenth century smaller notes began to creep in, and by the end of the sixteenth century we find the sixteenth note well established. We give an example above, of this early notation, from a volume in the library of the writer of this article.

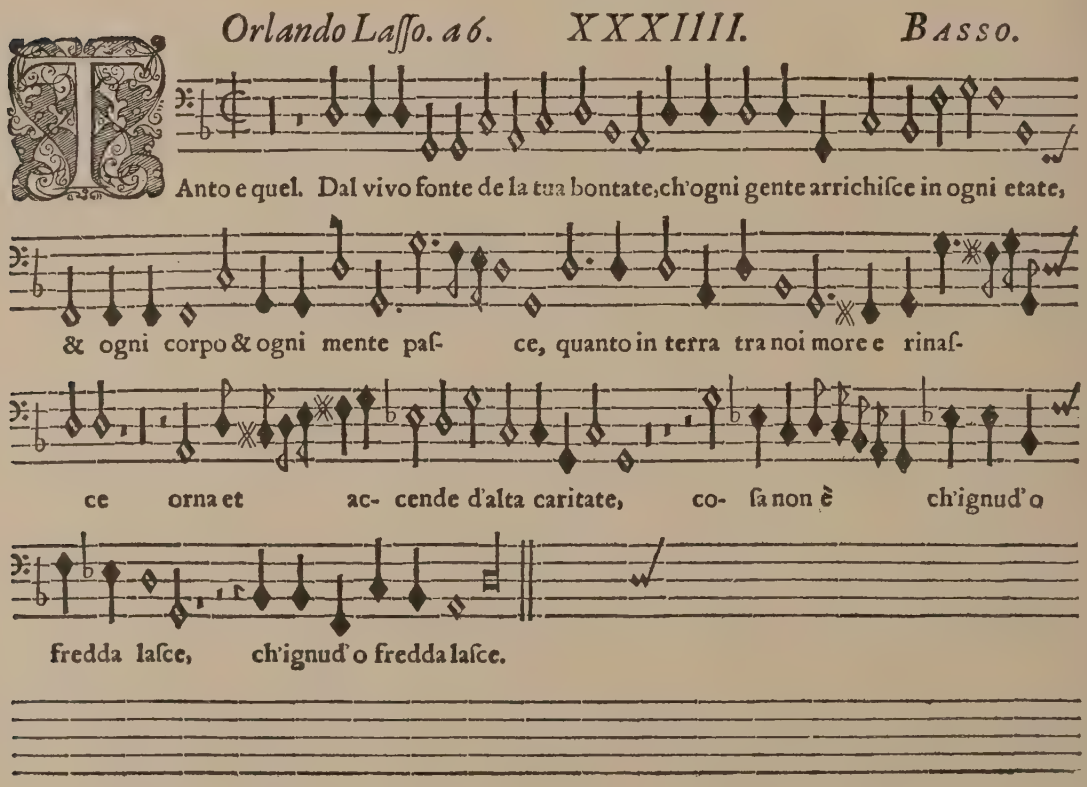
At the beginning these smaller notes were considered merely as embellishments or grace notes; and the minima, or half-note, was, in the early part of the sixteenth century, held to be the smallest real musical note. A peculiar use of color notation was evolved in the fourteenth century, in which red notes were intermingled with black, the red notes being of one-fourth less value than those in black.

Toward the end of the fourteenth century both the red and black notes gave way to the outline notes which are used to-day; but the shape of each note was a diamond, instead of the round, or oval, body of the present time. Probably the change from diamond to the round notation was made in the interest of easier writing. In some old manuscripts which the author possesses, we find, even at a time when diamond notes were constantly printed, the writers using a round note which could be made with a single stroke of the pen, where the diamond demanded four.

The rests seem from the very beginning to have been very nearly as at the present day. Several will be noticed in Examples on pages 52 and 53.

Not long after Guido's placing of the neumes upon a staff we find the beginning of accidentals. The flat and the natural arose from two forms of the letter notation which was very frequently used in the eleventh century. In playing the scale from C to C, one note gave considerable trouble to the old monastic writers, because it brought about an interval which they held to be particularly atrocious. Playing F and B together (the tritone or augmented fourth) was held to be the worst sin that could be committed in music. So anxious were the

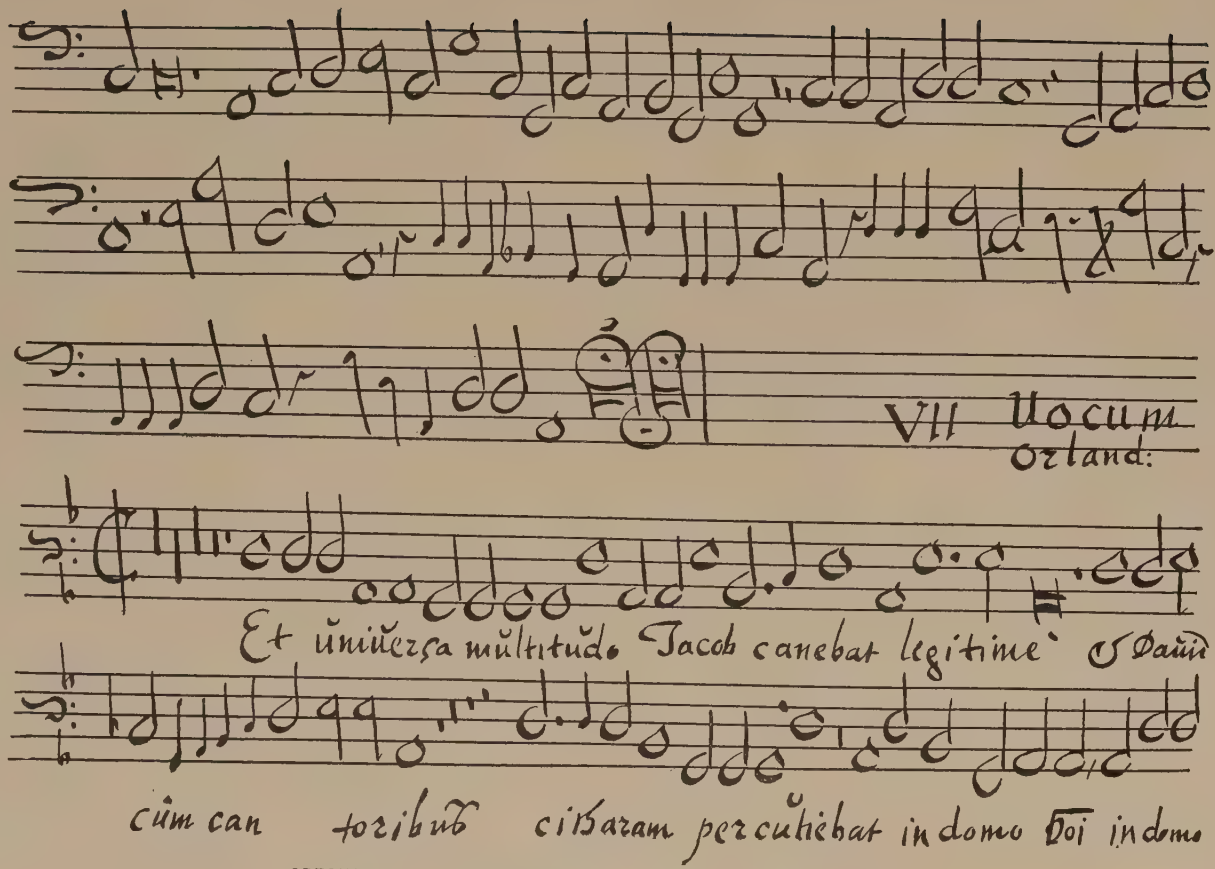
old monks to keep their pupils from using these notes together that they gave the name "diabolus," "the devil," to this particular interval. "*Mi contra fa diabolus est in musica*," wrote many of the old theorists. But if the B was flattened, or "softened" as they called it, the effect was held to be altogether beautiful. As a consequence we find two kinds of B's in the scale of the old church composers, — one the natural B, or "hard B," the other the "flattened B," or "soft B." The last was held to be a peculiarly charming progression, and Giraldus Cambrensis speaks with some enthusiasm of the sweet mode of the "softened B."

But in the old days of letter notation, if two different B's were required, it was natural that two shapes of letters would be equally necessary

SPECIMEN OF EARLY PRINTED MUSIC. A.D. 1587.

and this was the inevitable result; the "hard B" received the following square shape, ♮, and was called the "B quadratum"; the "soft B" was given the following shape, ♭, and was called the "B rotundum." The reader will see at a glance that from the "square B" arose the natural, from the "round B" the flat. These were definite letters, and meant two positions of the same musical note.

A peculiar error arose from this, in Germany, which at that time copied Italy in a semi-ignorant way. The Germans knew what note was signified by each of the signs; they knew that the "round B" betokened what we to-day call B flat, and they called that note *B*, and continue to call it so to-day; the "square B," however, they mistook for a German H; and while they knew what note was to be sung, they gave this note (B natural) the name of H, and this clerical error has been perpetuated even to the present time. It will be seen

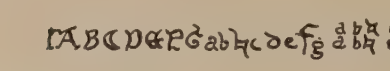
CHERCHANT LA NOTE. *A. Fabrès.*



SPECIMEN OF MUSICAL MANUSCRIPT OF SIXTEENTH CENTURY.

Showing change to round notes.

in the following letter scale, which we copy from old mediæval manuscripts, that both shapes of B occur in the succession of letters.



The sharp arose somewhat later, and seems never to have been employed in connection with a single letter, but to have been used as a sign of elevation to all letters of the scale equally. In its original shape it was a Saint Andrew's cross, as may be seen in musical example, No. XV.

The rhythmic signs at this epoch were of the most complicated description. The *Perfectum*, the triple rhythm which represents the Trinity, was held to be the purest and best; but the many rhythms which existed before the establishment of the division of music into measures can scarcely be comprehended by the modern music reader. The "prolations," as they are called, form one of the most difficult studies connected with mediæval music. We will not endeavor to teach these to the modern student, for the task would be both a severe and unnecessary one; we have found more than *forty* different rhythmic signs in mediæval music! The effort to establish triple rhythm as the only true rhythm of music most naturally failed; many popular songs of the Middle Ages, as well as much of the instrumental music, went on placidly in even rhythm.

When smaller notes than the semi-brevis appeared, new rules began with them. The stem of the longa, for example, was at first always turned downward, that of the minim and all shorter notes upward; but early in the sixteenth century this rule seems to have been abolished.

In all this old music we find no trace of the bar-line. The division into phrases is all that is necessary for the comprehension of its structure. It may be stated as emphatically true of counterpoint in general, that it is less rhythmic, less accented, than harmony; and it is possible, had the contrapuntal style continued to our own times, that the bar-line would not have been established at all, and the division of music into phrases have been deemed adequate for all practical purposes. It may seem strange to the average musician unacquainted with the old forms of counterpoint, that the division of music into measures is sometimes not a help but a hindrance to the perfect performance of certain canonic structures.

We have already stated that every great reform in music was reflected by an advance in notation. A great reform in musical matters took place shortly before the year 1600, when the contrapuntal structure of vocal music gave way to the solo song, when the opera replaced the old madrigal and the intricate ecclesiastical music. Now for the first time a stronger rhythm was deemed desirable and necessary, and in response to this demand the bar-line made its appearance. Music was divided into measures, the whole note was regarded as the unit, and modern rhythms appeared.

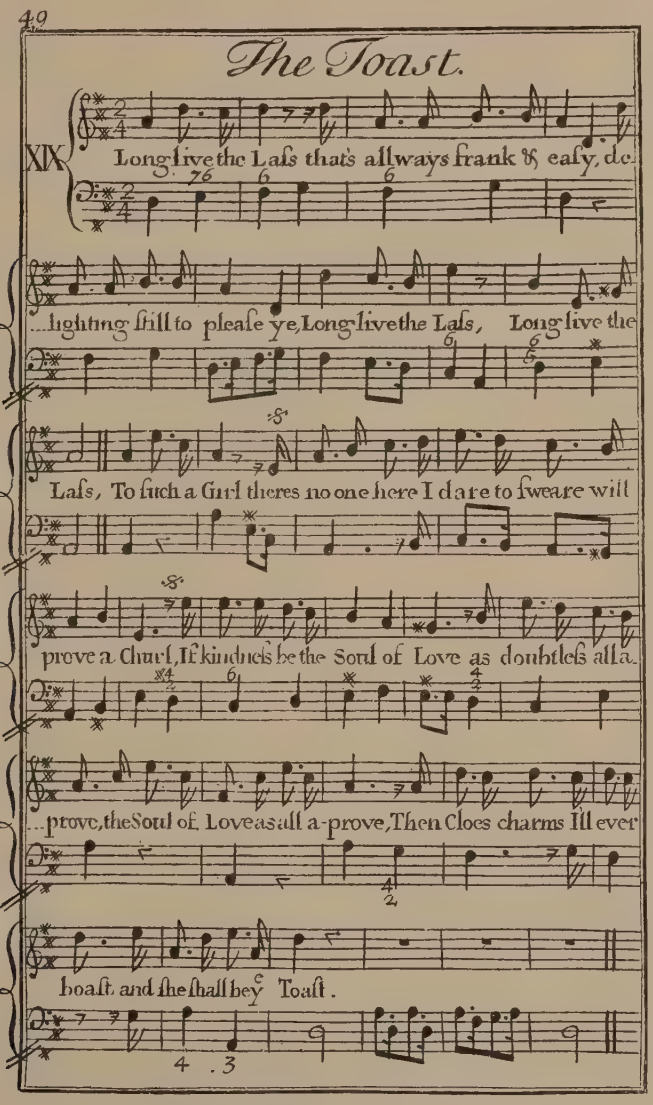
The rhythmic signs were, in the seventeenth century, very much as at present; one relic of the old religious times remained, and is still used in modern music. The old sign for the *Perfectum*, that "perfect rhythm" which represented the Trinity in its triple pulsations, was a circle, O; when the monastic musicians were obliged to allow the even rhythm to take its place in music they gave to it the name of *Imperfectum*, and broke the circle thus, C; and from this comes the sign so often used for 4—4 rhythm, which some ingenuous commentators would have us believe is a "C," and stands for "Common Time"!

Little else of importance remains to tell of the development of modern notation. The signs of musical tempo and expression arose with the opera, after 1600 (Frescobaldi seems to have been the pioneer, with the word "Adazio"—and misspelled!), and as Italian opera was a dominant influence in music for at least two centuries, it is but natural to find our tempo and expression marks in Italian, although Wagner, Berlioz, Schumann, and a few others sought to introduce the vernacular for musical composers. It would, however, be rather awkward if every composer followed this example, and Liszt had given his signs in Hungarian, Tschaikowsky in Russian, Grieg in Norwegian, Dvořák in Bohemian, etc., etc. The universal language of notation demands an equally universal language of signs; and, as Italian has the right of precedence, it seems advisable to continue it. Beethoven, the most careful of musicians, in 1816 began to use German for his tempo and expression marks; he returned to the Italian in 1817.

The mediæval music had only three or four expression marks. "F" meant *Fragor*, or loudness; "C," *celeriter*, or haste; and "T," *teneatur*, to retard or hold. Jean De Muris, about 1350, wrote: "In Music there are three speeds,—

quick, slow, and medium"; and Zarlino, in one of his sixteenth-century tomes, says: "Let music be counted by the speed of a healthy pulse."

Music-printing began with Ottaviano dei Petrucci, in Italy, in June, 1501, an epoch-year for the art.



SPECIMEN OF ENGLISH MUSIC-PRINTING. 1723.

In 1664 John Playford, the English composer and music-printer, groups his notes together instead of printing each stem separately, and says, —

"This example shows, that many times in Songs or Lessons, two, four, or more *Quavers* or *Semi-quavers* are tyed together by a long stroke on the top of their Tails; and though they be so, they are the same with the other, and are so tyed for the benefit of the sight, when many *Quavers* or *Semi-quavers* happen together, not altering the measure or proportion of Time."

In this connection it may be mentioned that the English have kept to the old nomenclature used

in mediæval music, not changing when the seventeenth century composers introduced the measure and made the whole note the unit; therefore the whole note is still called by them the "semi-breve," the half-note the "minim," the quarter-note the "crotchet," the eighth-note the "quaver," etc., the terms for the smaller notes being English in origin.

The introduction of keys containing many sharps or flats was prohibited in the old music; the entire circle of the keys, with all their signatures, only appears in 1722, when Bach wrote the "Well-tempered Clavichord," and freed modulation; the double-sharp and double-flat therefore date from this time. The *fermata*, or hold, 𝄐, was first used in 1508; the swell, , in 1638; "D. C.," in 1693; the three clefs, the F, C, and G, were used even in the Middle Ages, but the last-named did not take root until the seventeenth century, being very sparingly used before that time. Finger-marking was scoffed at in the seventeenth century; but in the eighteenth century the Italian masters had already invented a good system, Pasquali preceding even Philipp Emanuel Bach in this field. The so-called "American fingering" (x, 1, 2, 3, 4) was the earliest, taking its rise from the fact that the thumb was rarely used upon the harpsichord or clavichord, and not at all upon the violin. This ought to be called the "English fingering" from the fact that England used it as early as any nation (of course long before America), and is the chief user of this system to-day.

Spite of many details which came in later, it is not too much to state that our notation was fairly established by the beginning of the eighteenth century. The present writer has many almost perfect examples of musical notation, printed before 1730 in England, which was the most advanced in the technique of music-printing at that time; and, by reference to the specimen on page 55 the reader will perceive that the music of nearly two centuries ago was not vastly different from that of to-day.

Summing up the subject, we can reiterate that notation was not the invention of any single mind, but the accretion of the ages. If this fact were more thoroughly understood, fewer reformers would rush in with a wild effort to "improve it." That it will be constantly added to is undoubted. Liszt, Rubinstein, and a host of modern composers, have not scrupled to invent signs when necessary; and the reader, by referring to the "Dictionary of Musical Terms," included in this volume, will see for himself that some new signs (particularly in the matter of rhythm) have been brought about in very recent days; but anything like a change of system is improbable.

One may welcome those who have endeavored by Tonic Sol-fa, by character-notes, and other devices, to make the reading of musical progressions and intervals easier to the masses; but to the professional musician and the cultivated amateur the notation that has grown up through almost a thousand years must remain as one of the most fixed and permanently established matters in the domain of music.

SINGING BAND. *F. Laufberger.*

PHILOSOPHY
OF MUSIC

THE PHILOSOPHY OF MUSIC

"THE tree of knowledge" is a symbol, in which Philosophy is represented by the trunk, Science by the branches, and Art by the efflorescence. First comes the philosopher, who explores the mysteries of nature, discovering and formulating general principles which constitute the fundamental part of any science. Then follows the scientist, who applies these general principles to some special department of human knowledge, formulating laws which shall best express the sum of his knowledge. After him comes the artist or artisan, who avails himself of this knowledge, and turns it to practical account in the boundless field of human effort.

So far as music is an art, it may be said to be the expression of human thought and feeling through the medium of sound. The musical artist is, therefore, either the performer who actually produces the sound, or the composer who controls and directs the action of the performer, just as the latter controls and directs the action of his instrument or voice.

In so far as the performer is controlled by the will of the composer, he is merely a living musical instrument; but whenever he interprets the composition, and infuses it with his own personality, he becomes an artist.

The science of music is a term frequently used to express the merely technical knowledge acquired by the student who receives instruction in "Thorough Bass," "Harmony," "Counterpoint," etc. Strictly speaking, this more properly belongs to the *art* of music, as it is simply the knowledge of the art of composition. Such knowledge, when well acquired, is sufficient to satisfy the needs of a composer, from a practical point of view. It is usually based, however, entirely on observation and imitation of what has been done before, with very little reference to the reason why. The student has acquired the habit of observing certain rules of musical composition, which, like the rules of literary composition, are based upon precedent. Because Bach, Händel, Mozart, and other great masters have kept within certain metes and bounds, these prescribed formulae are accepted as authoritative. Suppose, however, these great masters could be summoned into court, and required to explain the laws of acoustics upon which they formed their various styles of expression. If they frankly admitted, as they probably would, that this phase of the subject had never occurred to them, we would excuse them, on the ground that a true artist ought never to be called upon to justify an action, no matter how erratic it may appear. If, however, they should attempt to prove, for instance, that the laws of nature forbade the use of consecutive fifths, then we would greet them as men of science. In other words, technical knowledge, if based on philosophical principles, is scientific, but if it is only formulated tradition it is purely artistic. Thus it becomes evident that the *science* of music is limited to the proper classification of the observed phenomena of acoustics, so far as they relate to the musical art and the formulating of rules or natural laws governing these relations.

The scope of the philosophy of music is much wider and deeper than this. The first question with which it has to deal is, "What is music?"

Music is a succession of sounds of peculiar kinds, bearing certain fixed relations to each other as to pitch, called scales, and arranged into a complicated structure at the will of the composer. We are thus led to inquire first into the purely physical characteristics of the sounds employed, secondly, as to their primary or elementary arrangement into scales, and thirdly, as to the final complex structure. The investigation of the questions of arrangement and structure will force upon our attention the fact that music is always constructed according to certain *forms*, which are either laid down as

rules of composition, or are observed as traditionally correct. The problem will thus resolve itself into a philosophical inquiry as to the nature, the origin, and the foundation of these forms. How far they are based upon physical principles which can be deduced from the laws of acoustics and their known physiological effects upon the human ear, and how far they are caused by aesthetical principles due to the free action of the human mind independently of any physical considerations, are interesting and important questions. Upon their decision depend the weight and authority of the rules and forms which are commonly accepted as orthodox. So far as these are based on physical principles they are, like the laws of Medes and Persians, unalterable; but so far as they are due to human choice the same power that made them may break them with impunity.

Helmholtz maintains that this human choice has been exercised under stress of natural promptings, which if identified and analyzed would be found to be governed by natural law, and therefore entitled to respect.

Be this as it may, these natural promptings are born from conditions which are ever changing, so that their authority must at best be ephemeral. They seem to present an analogy to the forms of speech and language, which vary not only in different nations, but in the same nation at different times. They arise not from any natural propriety, but from some complicated series of physiological accidents, impossible to trace; and they undergo continual transformation for reasons equally obscure.

The assertion that because a certain combination of musical sounds seems to satisfy the human ear, it must therefore be founded on natural law, is easily disproved by simply changing the audience. An Oriental concert performed before an Occidental audience is seemingly full of discord, and not only fails to satisfy the ear, but is often painfully distressing. On the other hand, an Occidental concert before an Oriental audience produces the same unsatisfying effect. Who shall decide between them? The plain fact is, that the human ear likes what it is accustomed to hear, and rebels at innovations. (See article on "Music and Health" in this volume.)

The established forms of grammar to which we have become accustomed in our speech are no more intrinsically right and proper than other forms would be if they were equally familiar. The most uncouth form of expression of to-day could be made to seem conventionally correct if adopted by general consent, and used persistently for a century or two. It is all a question of familiarity. The history of music is a record of changing standards of taste; and why this has been so, and will ever continue to be so, may be learned by a careful consideration of the subject matter of the art itself. It is impossible within the limited space at command to give more than an outline of the subject; but even this will be well worth while for those who may not have given the matter serious attention. The philosophy of music, like many other of the higher branches of knowledge, appeals more directly to the intellectual than the practical side of art; nevertheless it has its practical bearing, and in any event must enlarge the horizon of the intelligent student, thereby adding to his power of discrimination and discernment.

Although an explanation of the elementary principles of acoustics properly belongs to the science rather than the philosophy of music, nevertheless a knowledge of these principles must precede a proper understanding of the subject before us. Therefore we will begin at the beginning, and inquire as to the physical characteristics of the material employed by the musician; that is to say, the phenomena of sound in general. Professor Elisha Gray, in his recent publication entitled "Nature's Miracles," introduces the subject in this way.

"Sound is one of the important mediums through which the inner man communicates with the outer world. It may be defined as motion or vibration in its objective or outer manifestations, and as sensation in its effect upon our consciousness through the medium of the organs of hearing.

"There are many avenues to the brain that are in touch with the outer world through the medium of the five senses: through all of these avenues the same general vehicle is used to carry intelligence to the brain of the percipient — to wit, motion.

"It is motion of the optic nerve that carries to the brain the sensation of light. It is motion of the gustatory nerve that carries to the brain the sensation of taste. It is motion of the olfactory nerve that carries to the brain the sensation of smell. It is motion of the nerves of feeling that carries the sense of touch, and it is motion of the auditory nerve that gives us the sensation of sound.

"Nothing but sound can be transmitted through the auditory nerve, and nothing but light through

LE LUTRIN D'AULNAY-LES-BONDY. *E. de Boislecomte.*

the optic nerve. The same is true of the other avenues to the brain; you cannot smell with your tongue or taste with your nose. Each special nerve has its special use. If we have lost one of these highways between the outer world and the inner self, by so much we are dead to physical things.

"All the phenomena of sound, outside of the point where we perceive it, are simply motions of some character. The different kinds of sound are infinite, but each sensation of sound that differs from another has its correlative in the air outside of the ear as a peculiar form of motion. For instance, if some one out of sight, but not out of hearing, should sound a note on a violin, you would say that you heard a violin; but if some one should sound a note, of the same pitch, on an organ, you would say that you heard an organ. What is the difference? Simply that the kind or quality of the motion made by the violin differs from that of the organ; hence the difference of the sensation."

Having thus defined sound in general, he proceeds to discriminate between sounds musical and otherwise.

"We have now to consider the physical distinction — outside of ourselves — between noise and music: we know the distinction as a sensation; every one does. We know that noise is irritating to the nerves, producing a series of unpleasant and irregular shocks. The more irregular and disjointed the sounds are, the more unpleasant the sensations.

"If we should throw a lot of nails, scraps of metal, stones, and other hard substances into a barrel and roll it, we should hear noise of a very unpleasant kind. But if we could arrange these noises or irregular sound-impulses into a certain order of succession, we should have musical tones instead, that would be pleasing to the ear. Musical sounds are single sound-impulses that are repeated in a certain order of succession. The time between one sound-impulse and another must be the same. There must be perfect periodicity.

"If we should take one of the pieces of metal out of the barrel referred to, and tap it at the rate of forty times per second on the side of the barrel, and have all the taps exactly one-fortieth of a second in time apart, you would hear instead of a noise, a musical tone. If a locomotive should puff forty or fifty or more times per second, and in equal periods, it would announce itself with a musical tone of wonderful power.

"If the noises of the streets of a city could be arranged in order, we might have from them orchestral music instead of disjointed and disagreeable sounds."

Every musical tone has three separate and distinct properties, any one of which may vary without reference to the other two. These three factors are,—

1. The pitch of the sound.
2. The strength of the sound.
3. The quality of the sound.

A trombone, a flute, and a violin may all sound the same note, say, for instance, middle C. The pitch will be the same, but the strength and quality of the sounds evoked will differ greatly.

Again a French horn may sound middle C, a violoncello may sound E, and a clarinet may sound G, care being used to give uniform intensity or force to the three sounds; yet they will differ both as to pitch and quality.

Again, three cornets may sound C, E, and G respectively, but with different degrees of intensity; in this case the quality will be the same, but the pitch and strength will vary.

It is evident that other combinations of these three factors could be illustrated in like manner, but this will suffice to prove that they are quite independent of each other. Being thus independent, we may expect to find that the physical causes which produce them are likewise independent, and may be studied separately.

We have seen that the sensation of sound is produced by the impact of waves of sound upon the drum of the human ear, just as a drummer might beat a tattoo on a drum-head, the only difference being that the atmospheric disturbance caused by the sound waves takes the place of the drumstick, and a further difference in the rapidity of the strokes. The drumstick might attain a speed of 30 or 40 strokes per second; but the sound waves will strike from 16 to 40,000 times per second, and the ear will distinguish the rate with wonderful accuracy.

Now if, as is the case, the sole instrumentality through which the ear is actuated is the sound-wave which strikes it, then these three properties (pitch, strength, and quality,) imply a threefold character in the constitution of the sound-wave itself, which may be easily analyzed and identified. We will consider them separately.

First as to pitch. Physically, pitch depends solely on the *frequency of vibration;* that is to say,

on the number of vibrations executed during a given time. The *second* is universally employed as the unit of time in treating sonorous vibrations, so that *frequency* means *number of vibrations per second.* There are several methods by which the rate of vibration may be accurately counted, but the instrument which is chiefly employed for this purpose is called the siren. It was devised by Cagniard de Latour, and is shown in Figs. 1 and 2, the former being a front and the latter a back view. It is thus described in Deschanel's "Natural Philosophy."

"There is a small wind-chest nearly cylindrical, having its top pierced with fifteen holes, disposed at equal distances around the circumference of a

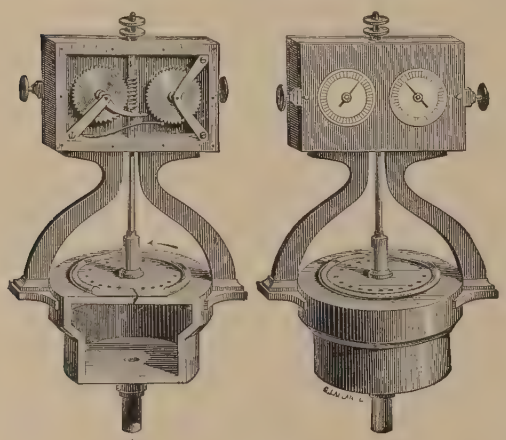


Fig. 1. Fig. 2.

SIREN.

circle. Just over this, and nearly touching it, is a movable circular plate, pierced with the same number of holes similarly arranged, and so mounted that it can rotate very freely about its center, carrying with it the vertical axis to which it is attached. This rotation is effected by the action of the wind, which enters the wind-chest from below, and escapes through the holes. The form of the holes is shown by the section in Fig. 1. They do not pass perpendicularly through the plates, but slope contrary ways, so that the air when forced through the holes in the lower plate impinges *upon one side* of the holes in the upper plate, and thus blows it round in a definite direction. The instrument is driven by means of a pair of bellows. As the rotation of one plate upon the other causes the holes to be alternately opened and closed, the wind escapes in successive puffs, whose frequency depends upon the rate of rotation. Hence a note is emitted which rises in pitch as the rotation becomes more rapid.

"The siren will sound under water, if water is forced through it instead of air; and it was from this circumstance that it derived its name.

"In each revolution the fifteen holes in the upper plate come opposite to those in the lower plate fifteen times, and allow the compressed air in the wind-chest to escape; while in the intervening positions its escape is almost entirely prevented. Each revolution thus gives rise to fifteen vibrations; and in order to know the number of vibrations corresponding to the note emitted, it is only necessary to have a means of counting the revolutions.

"This is effected by means of a worm cut on the revolving verticle axis (Fig. 1) engaging with a gear, which causes the hands on the outer dials (Fig. 2) to revolve like the hands of a clock or cyclometer, and thus indicate the number of revolutions made by the circular plate through which the fifteen air puffs are emitted on a single revolution.

"In order to determine the number of vibrations corresponding to any given sound which we have the power of maintaining steadily, we fix the siren on the bellows, the screw and wheel being disconnected, and drive the siren until the note which it emits is judged to be in unison with the given note. We then, either by regulating the pressure of the wind, or by employing the finger to press with more or less friction against the revolving axis, contrive to keep the note of the siren constant for a measured interval of time, which we observe by a watch. At the commencement of the interval we suddenly connect the screw and toothed-wheel, and at its termination we suddenly disconnect them; having taken care to keep the siren in unison with the given sound during the interval. As the hands do not advance on the dials when the screw is out of connection with the wheels, the readings before and after the measured interval of time can be taken at leisure. Each reading consists of four figures, indicating the number of revolutions from the zero positions, units and tens being read off on the first dial, and hundreds and thousands on the second. The difference of the two readings is the number of revolutions made in the measured interval, and when multiplied by 15 gives the number of vibrations in the interval, whence the number of vibrations per second is computed by division."

Having thus shown that the rate of vibration of

any tone can be actually counted, it follows that if the rate is known the pitch of the tone may be accurately expressed mathematically. For instance, suppose we have a tuning-fork sounding middle C which we wish to have duplicated. We find by the siren that it vibrates 256 times in a second. We write to some manufacturer in Europe ordering "a tuning-fork which vibrates 256 times per second." The order thus given is filled; and when the new tuning-fork arrives we compare it with the old one, and find that they emit precisely the same note. The European manufacturer has given us exactly the same pitch without knowing anything more than the rate of vibration.

The human ear is so constructed as to receive any tone which has a pitch not lower than 16 vibrations per second, and not higher than 40,000 per second. A lower rate than 16 does not produce the sensation of a continuous sound, but is merely a succession of strokes, more or less rapid. A higher rate than 40,000 fails to excite the auditory nerve at all, and therefore cannot be recognized *as sound.* If the rate is increased sufficiently, it will begin to affect the optic nerve; and we then call the sensation sight, and the rate of vibration expresses the impression of color.

It being granted that the pitch of any sound is entirely a question of the number of vibrations per second, it follows that every musical scale must be composed of tones having rates between 16 and 40,000 per second. That is to say, if we were to slowly start the revolution of the circular plate in a siren (Figs. 1 and 2), and gradually accelerate the speed, we would hear no sound until it sent forth 16 puffs per second. Then we would hear the lowest bass note that the human ear can recognize. Adding one vibration per second, we would raise the pitch almost imperceptibly; but continuing to add one vibration per second until the speed reached the limit of audibility at the upper end of the scale (40,000 per second), we would have covered the entire gamut of sounds which the human ear can distinguish. This means that we have sounded 39985 (16 to 40,000 inclusive) separate and distinct tones, each of which has as well-founded a natural right to call itself *a musical note* as any other. But now we turn to our piano keyboard, and find that in $7\frac{1}{2}$ octaves there are less than 100 keys. What has become of all these missing tones? and why are those which have found a place in our piano thus honored? The answer opens up some very interesting questions; but before replying directly it becomes necessary to inquire into some of the laws of vibration, which have largely influenced the construction of all musical scales.

Musical instruments may be divided into three groups: stringed instruments, like the piano or violin; wind instruments, like the organ or trombone; and percussive instruments, like the drum or chiming-bell. They are all vibratory, and their pitch depends wholly upon the rate per second of their vibratory motion. If this motion were simply a movement of the entire mass back and forth, like the swaying of a pendulum, the science of acoustics would be a comparatively simple matter. But while every vibrating body has a simple movement as a whole, we find upon closer study that it has a great many subsidiary movements which, though joining together in the general swing back and forth, have an independent swing of their own. The simple movement of an ocean swell carries with it innumerable lesser movements made by the billows, waves, wavelets, and ripples which compose it. The unified movement which every musical instrument makes carries with it these multitudinous minor movements, which not only determine the character and quality of its tone, but, as we shall see, control to some extent the selection of the particular pitches which should be employed in the construction of every musical scale. Were it not for these subsidiary movements all musical instruments would sound alike as to quality of tone, although of course their intensity or power would vary. It seems incredible that one could not distinguish between a trombone and a penny whistle, but were it not for these subsidiary movements they would sound exactly alike.

The vibratory action of all bodies being governed by the same law, an analysis of any one of them will suffice to give us a knowledge of the law. We will therefore take a harp-string as an example, and see how it behaves when in action. Its movement is too rapid to be followed by the eye, but the following experiments made and described by Professor Tyndall enable one to see just what it does.

"From the ceiling *c* (Fig. 3) hangs an India-rubber tube twenty-eight feet long. The tube is filled with sand to render its motions slow, and more easily followed by the eye. I take hold of its free end *a*, stretch the tube a little, and by properly timing my impulses cause it to swing to and fro as a whole, as shown in the figure. It has

its definite period of vibration, dependent on its length, weight, thickness, and tension; and my impulses must synchronize with that period.

"I now stop the motion, and by a sudden jerk raise a hump upon the tube, which runs along it as a pulse toward its fixed end; here the hump reverses itself, and runs back to my hand. At the fixed end of the tube, in obedience to the law of reflection, the pulse reversed both its position and the direction of its motion. Supposing *c*, Fig. 4, to be the fixed end of the tube, and *a* the end held in the hand; if the pulse, on reaching *c*, have the position shown in (1), it will, after reflection, have the position shown in (2). The arrows mark the direction of progression. The time required for the pulse to pass from the hand to the fixed end and back is exactly that required to accomplish one complete vibration of the tube as a whole. It is indeed the addition of such impulses which causes the tube to continue to vibrate as a whole.

Fig. 3.

Fig. 4.

"If, instead of a single jerk, a succession of jerks be imparted, thereby sending a series of pulses along the tube, every one of them will be reflected above; and we have now to inquire how the direct and reflected pulses behave toward each other.

"Let the time required by the pulse to pass from my hand to the fixed end be one second; at the end of half a second it occupies the position *ab* (1), Fig. 5, its foremost point having reached the middle of the tube. At the end of a whole second it would have the position *bc* (2), its foremost point having reached the fixed end *c* of the tube. At the moment when reflection begins at *c*, let another jerk be imparted at *a*. The reflected pulse from *c* moving with the same velocity as this direct one from *a*, the foremost points of both will arrive at the center *b* (3) at the same moment. What must occur? The hump *ab* wishes to move on to *c*, and to do so must move the point *b* to the right. The hump *cb* wishes to move toward *a*, and to do so must move the point *b* to the left. The point *b*, urged by equal forces in two opposite directions at the same time, will not move in either direction. Under these circumstances, the two halves *ab*, *bc*, of the tube will oscillate as if they were independent of each other (4). Thus by the combination of two *progressive pulses*, the one direct and the other reflected, we produce two *stationary pulses* on the tube *ac*.

"The vibrating parts *ab* and *bc* are called *ventral segments;* the point of no vibration *b* is called a *node*.

"The term 'pulse' is here used advisedly, instead of the more usual term *wave*. For a wave embraces two of these pulses. It embraces both the hump and the depression which follows the hump. The length of a wave, therefore, is twice that of a ventral segment.

"Supposing the jerks to be so timed as to cause each hump to be one-third of the tube's length. At the end of one-third of a second from starting, the pulse will be in the position *ab* (1), Fig. 6. In two-thirds of a second it will have reached the position *bb'* (2), Fig. 6. At this moment let a new pulse be started at *a;* after the lapse of an entire second from the commencement we shall have two humps upon the tube, one occupying the position *ab* (3), the other the position *b'c* (3). It is here manifest that the end of the reflected pulse from *c*, and the end of the direct one from *a*, will reach the point *b'* at the same moment. We shall therefore have the state of things represented in (4), where *bb'* wishes to move upward, and *cb'* to move downward. The action of both upon the point *b'*

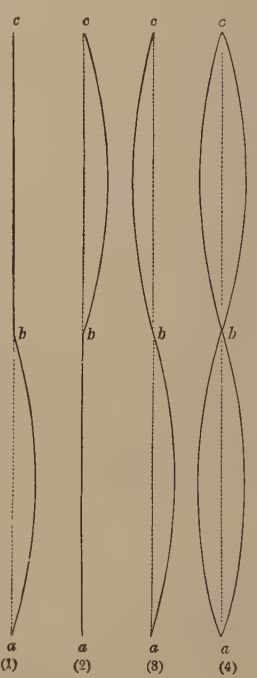


Fig. 5.

being in opposite directions, that point will remain fixed. *And from it, as if it were a fixed point, the pulse bb′ will be reflected, while the segment b′c will oscillate as an independent string.* Supposing that at the moment *bb′* (4) begins to be reflected at *b′* we start another pulse from *a*, it will reach *b* at

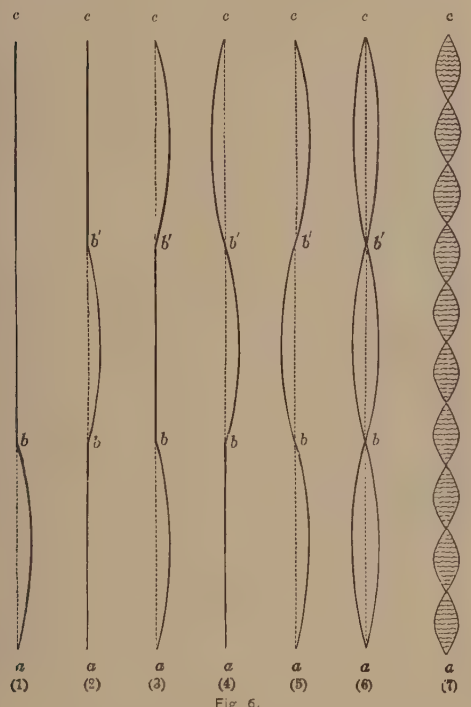


Fig 6.

the same moment the pulse reflected from *b′* reaches it. The pulses will neutralize each other at *b*, and we shall have there a second node. Thus by properly timing our jerks, we divide the rope into three ventral segments, separated from each other by two nodal points. As long as the agitation continues the tube will vibrate as in (6).

"There is no theoretic limit to the number of nodes and ventral segments that may be thus produced. By the quickening of the impulses, the tube is divided into four ventral segments separated by three nodes; quickening still more we have five ventral segments and four nodes. With this particular tube the hand may be caused to vibrate sufficiently quick to produce ten ventral segments, as shown in Fig. 6 (7). When the stretching force is constant, the number of ventral segments is proportional to the rapidity of the hand's vibration. To produce 2, 3, 4, 10 ventral segments requires twice, three times, four times, ten times the rapidity of vibration necessary to make the tube swing as a whole. When the vibration is very rapid the ventral segments appear like a series of shadowy spindles, separated from each other by dark, motionless nodes. The experiment is a beautiful one, and it is easily performed.

"The subject of stationary waves was first experimentally treated by the Messrs. Weber, in their excellent researches on wave-motion. It is a subject which will well repay your attention by rendering many of the most difficult phenomena of musical strings perfectly intelligible. It will make the connection of both classes of vibrations more obvious if we vary our last experiments. Before you is a piece of India-rubber tubing, ten or twelve feet long, stretched from *c* to *a*, Fig. 7, and made fast to two pins at *c* and *a*. The tube is blackened, and behind it is placed a surface of white paper, to render its motions more visible. Encircling the

Fig 7.

tube at its center *b* (1) by the thumb and forefinger of my left hand, and taking the middle of the lower half *b a* of the tube in my right, I pluck it aside. Not only does the lower half swing, but the upper half also is thrown into vibration. Withdrawing the hands wholly from the tube, its two

halves, *a b* and *b c* continue to vibrate, being separated from each other by a node *b* at the center (2).

"I now encircle the tube at a point *b* (3) one-third of its length from its lower end *a*, and, taking hold of *a b* at its center, pluck it aside; the length *b c* above my hand instantly divides into two vibrating segments. Withdrawing the hands wholly you see the entire tube divided into three ventral segments, separated from each other by two motionless nodes, *b* and *b'* (4). I pass on to the point *b* (5), which marks off one-fourth of the length of the tube, encircle it, and pluck the shorter segment aside. The longer segment above my hand divides itself immediately into three vibrating parts. So that, on withdrawing the hand, the whole tube appears before you divided into four ventral segments, separated from each other by three nodes, *b b' b''* (6). In precisely the same way the tube may be divided into five vibrating segments with four nodes.

"This sudden division of the long upper segment of the tube, without any apparent cause, is very surprising; but if you grant me your attention for a moment, you will find that these experiments are essentially similar to those which illustrated the coalescence of direct and reflected undulations. Reverting for a moment to the latter, you observed that the to-and-fro motion of the hand through the space of a single inch was sufficient to make the middle points of the ventral segments vibrate through a foot or eighteen inches. By being properly timed the impulses accumulated, until the amplitude of the vibrating segments exceeded immensely that of the hand which produced them. The hand, in fact, constituted a nodal point, so small was its comparative motion. Indeed, it is usual and correct to regard the ends of the tube also as nodal points.

"Consider now the case represented in (1), Fig. 7, where the tube was encircled at its middle, the lower segment, *a b* being thrown into the vibration corresponding to its length and tension. The circle formed by the finger and thumb permitted the tube to oscillate at the point *b* through the space of an inch; and the vibrations at that point acted upon the upper half *b c* exactly as my hand acted when it caused the tube suspended from the ceiling to swing as a whole, as in Fig. 3. Instead of the timid vibrations of the hand, we have now the timid vibrations of the lower half of the tube; and these, though narrowed to an inch at the place clasped by the finger and thumb, soon accumulate, and finally produce an amplitude, in the upper half, far exceeding their own. The same reasoning applies to all the other cases of subdivision. If, instead of encircling a point by the finger and thumb, and plucking the portion of the tube below it aside, that same point were taken hold of by the hand, and agitated in the period proper to the lower segment of the tube, precisely the same effect would be produced. We thus reduce both effects to one and the same cause — namely, the combination of direct and reflected undulations.

"And here let me add that, when the tube was divided by the timid impulses of the hand, not one of its nodes was, strictly speaking, a point of no motion: for were the nodes not capable of vibrating through a very small amplitude, the motion of the various segments of the tube could not be maintained."

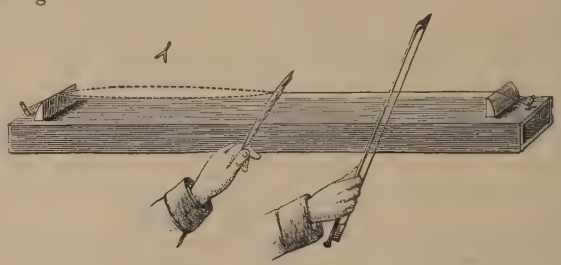


Fig. 8.

Having thus explained the mechanical motions of a vibrating rubber-cord, Professor Tyndall passes on to the consideration of a sounding-string such as might be used on a musical instrument. A violin string mounted, as shown in Fig. 8, is used in the following experiments.

"Placing the feather-end of a goose-quill lightly against the middle of the string, and drawing a violin-bow over one of its halves, the string yields the octave of the note yielded by the whole string. The mere *damping* of the string at the center, by the light touch of the feather, is sufficient to cause the string to divide into two vibrating segments. Nor is it necessary to hold the feather there throughout the experiment. After having drawn the bow, the feather may be removed; the string will continue to vibrate, emitting the same note as before. We have here a case exactly analogous to that in which the central point of our stretched India-rubber tube was damped, by encircling it with the finger and thumb, as in Fig. 7 (1). Not

only did the half plucked aside vibrate, but the other half vibrated also. We can, in fact, reproduce, with the vibrating string, every effect obtained with the tube. This, however, is a point of such importance as to demand full experimental illustration.

"To prove that when the center is damped, and the bow drawn across one of the halves of the string, the other half vibrates, I place across the middle of the untouched half, a little rider of red paper. Damping the center and drawing the bow, the string shivers, and the rider is overthrown (Fig. 8).

"When the string is damped at a point which cuts off one-third of its length, and the bow drawn across the shorter section, not only is this section thereby thrown into vibration, but the longer section divides itself into two ventral segments with a node between them. This is proved by

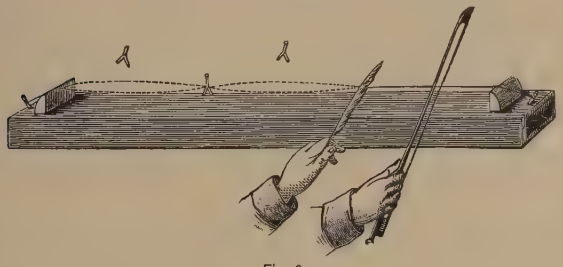


Fig. 9.

placing small riders of red paper on the ventral segments, and a rider of blue paper at the node.

"Passing the bow across the short segment, you observe a fluttering of the red riders, and now they are completely tossed off, while the blue rider which crosses the node is undisturbed (Fig. 9).

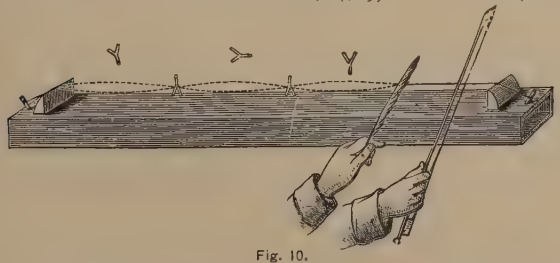


Fig. 10.

"Damping the string at the end of one-fourth of its length, the bow is drawn across the shorter section; the remaining three-fourths divide themselves into three ventral segments, with two nodes between them. This is proved by the unhorsing of the three riders placed astride the ventral segments, the two at the nodes keeping their places undisturbed (Fig. 10).

"Finally, damping the string at the end of one-

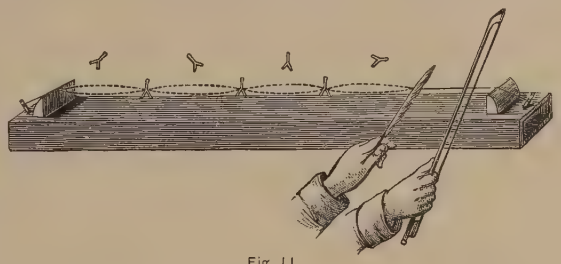


Fig. 11.

fifth of its length, and arranging, as before, the red riders on the ventral segments, and the blue ones on the nodes, by a single sweep of the bow the four red riders are unhorsed, and the three blue ones left undisturbed (Fig. 11). In this way we perform with a sounding string the same series of experiments that we formerly executed with a stretched India-rubber tube, the results in both cases being identical."

Having thus shown the compound mechanical motions set up in a string by plucking, striking, or scraping it, we have now to consider how these motions affect the sound evoked. The diagram, Fig. 12, will aid in the explanation of this question, which is clearly set forth by William Pole in his lectures delivered at the Royal Institution of Great Britain in 1877. He says,

"Suppose a string of such length, thickness, and tension, that when it is set sounding it will vibrate sixty-four times in a second, giving the note C (second leger line below the bass clef). This simple vibration of the string as a whole may be represented by the figure marked I.

"If one could prevent any other kind of vibration from being set up, the sound would be a simple one, giving the fundamental note alone. But this would be difficult; for the string has a natural tendency to take upon itself other motions, and thereby complicate the effect produced. In the first place it will divide its length into two equal parts, and each of these halves will set up a vibration of its own, as represented in figure II. with what is called a *node* or point of rest in the middle of the string. And as, by a well-known mathematical law, each vibration of

the half-string will take place in half the time of the main or fundamental one of the whole string, we shall get an additional note due to 128 vibrations per second, forming the first *harmonic*, or second *partial tone*, an octave higher. But further, the string may also divide itself into *three* equal parts by two nodes, as in figure III., and each of these parts will vibrate separately in one-third the time of the fundamental vibration, giving the third partial tone a twelfth above the fundamental. Similarly the string may further divide itself into four, five, six, and a still greater number of parts, each of which will form a perfect vibration of itself, producing its corresponding harmonic or partial tone. Only the first four are shown on the diagram, but these are sufficient to illustrate the principle. The various nodes are marked with the letter N.

Diagram to Illustrate the Compound Vibrations of Strings.

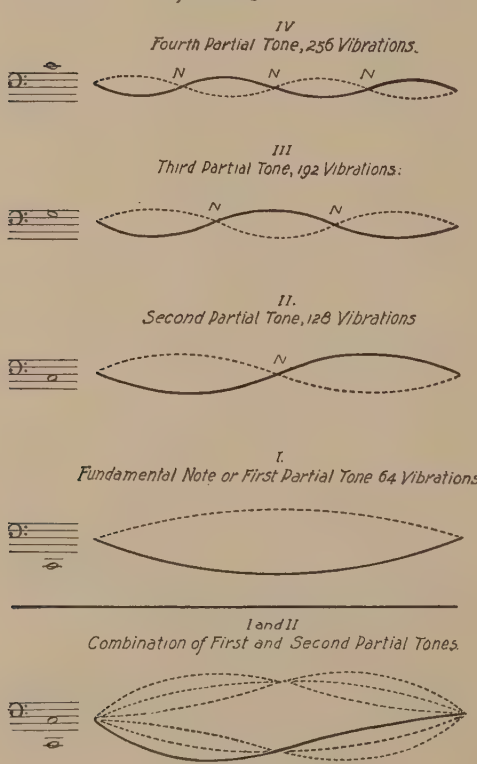


Fig. 12.

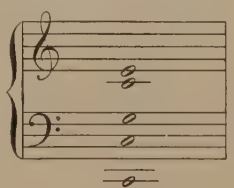
"Now, when a string is struck or bowed, it will not only vibrate as a whole, but a number of these subsidiary vibrations will be excited at the same time, and all will go on simultaneously. It would be hardly practicable to represent graphically the result of all these combined vibrations; but the lower figure of the diagram is intended to show the combination of the two simplest, i.e., the fundamental note and its octave.

"We have only then to imagine a certain number of these vibrations to be combined, varying in strength in the proper way, and we get at once an intelligible and simple idea of the nature and mode of production of a *compound sound.*

"And it may be added that this is not mere speculation. Ingenious methods have been devised for rendering appreciable the motions of vibrating strings, and the compound vibrations above described have been actually observed and recorded.

"The string gives the simplest example of the mode of generation of a compound sound; but the compound wave of the air may be equally well produced by other means, such as a reed, or may originate in the air itself, as in an organ-pipe. In most cases where a fundamental note is formed, there is the same tendency for it to be accompanied by subsidiary fractional vibrations, producing corresponding overtones."

We now begin to come in sight of an answer to the question as to why our piano keyboard contains less than 100 out of a possible 39985 notes. It is evident that the *first* subdivision into halves made by any vibrating body will *naturally* produce a subsidiary harmonic tone that bears a relation to the fundamental tone (which is produced by the back and forth motion of the body as a whole) represented by our octave. The second subdivision into thirds will produce a subsidiary harmonic tone bearing a relation to the fundamental tone represented by our perfect fifth. The next subdivision into quarters would produce a subsidiary harmonic tone two octaves above the fundamental tone, while a further subdivision into fifths would produce another harmonic, a major third above the latter. These three harmonics sounded successively give us the intervals which may be said to constitute the backbone of our diatonic musical scale, and sounded simultaneously constitute the backbone of our modern system of harmony. Before proceeding to inquire as to the



genesis of the other intervals contained in the diatonic scale, let us pause to recognize the validity of the claim which these three harmonic intervals have to a place on the piano keyboard.

Make any fundamental sound you please, with any material you choose, and your ear will be saluted not only with the fundamental tone, but with its octave and fifth in varying degrees of strength, sometimes almost overpowered by other overtones, but never entirely absent. There is no sound in nature which does not contain the octave and fifth, whether it be the beating of the surf upon the seashore, the sighing of the wind through the forest, or the rolling of the thunder through the heavens. The blacksmith at his anvil cannot avoid sounding it as he works. The carpenter planing a pine board makes it sing this harmony. Roll an empty barrel down hill, and as it bumps along, it will voice its discontent with these intervals. The steam-engine challenges attention in these stentorian tones; and in short, if we were to prohibit every sound containing them, all nature, including man, would be condemned to eternal silence.

With such a *raison d'être* the right to a place in every musical scale seems assured to the intervals known as the octave and the fifth. The human ear has become so accustomed to hear them in every natural sound that it may be said to crave them. We are creatures of habit, and like whatever is familiar, but shrink from things new and strange. This philosophical observation has a wide range, and applies not only to the subject under consideration, but to every department of human experience. The savage vocabulary recognizes no distinction between a "stranger" and an "enemy," and therefore has but one word to describe both. A stranger is, among savages, an enemy, and therefore needs no separate name. The history of the musical scale and of the development of the art of music is a record of this natural conservatism of human nature. The uncultivated ear was pleased with, and at first accepted, only the intervals and harmonics upon which Mother Nature had brought it up. These universally familiar harmonics might well be called "milk for babes"; and when the child was offered a more liberal diet, it rebelled at first, but gradually accepted one after another of the strange dishes placed before it, until at last they too became familiar, and were therefore relished.

Such being the fact, we may reasonably expect to find these two intervals included in every musical scale, and indeed such is the case. Beginning with the yellow or Mongolian race, we find that the Chinese practically use five notes out of eleven theoretical intervals; and these five correspond with the black keys of the piano, which constitute the "pentatonic scale," and include the octave, the fifth, and the third. In this scale may be played many simple melodies, such as "Annie Laurie," "Comin' thro' the Rye," "Killarney," and many old Irish and Scottish songs. Everyone likes them, because they satisfy the fundamental demands of the human ear, and do not require any special education or training to be readily appreciated. They are a part of the "milk diet" which is thoroughly normal and healthful for everyone, and especially palatable to the musically uneducated individual of a cultivated race, and to all the individuals of any primitive race which has not attained to a higher degree of musical culture.

The Egyptian music seems to have been of considerable extent and variety, but its exact nature cannot be determined. It seems clear, however, that the Egyptians acknowledged the octave and that it was largely subdivided.

The music of the Chaldeans, Babylonians, Assyrians, and Phoenicians may be assumed to have been like that of the Egyptians, the octave being traced among them.

Arabian music seems to involve extraordinary complications, but our octave and fifth constitute their most important intervals.

The musical system in India recognizes the octave, the fifth, and the fourth, the latter being merely an inverted fifth. Their octave is divided theoretically into twenty-two parts; but their practical scale consists of seven degrees, among which the twenty-two intervals are unequally divided.

The Persian music seems to have been a remote ancestor of our own; the octave being divided into twenty-four parts, equivalent to what we would call quarter-tones, each interval being half our semitone.

The early Greek music is enveloped in great obscurity; but in the sixth century a great philosopher, Pythagoras, established for the art a definite and scientific basis, intelligible and available for all time. He was the first to discover the relation between music and mathematics, so that a sound could be identified by its numerical value. As will presently be shown, he gave us our diatonic scale in very nearly its present form, and may fairly

be called the Father of Musical Science. In studying the action of a vibrating string, he discovered that the *length* of the string defined its pitch, and that by dividing the string into two equal parts he produced the octave, and that two-thirds of the length of the original string gave the interval we now call the *fifth*.

Again following the same principle, he next divided his string into four equal parts, and found that three-fourths of the length gave an interval of a *fourth*.

He could not fail to perceive a remarkable symmetry in these two arrangements: for the fifth reckoned upwards from the lower note of the octave gave the same note as the fourth reckoned downwards and *vice versa;* the fourth reckoned upwards gave the same note as the fifth downwards. Thus the octave proved to be made up of a fourth and a fifth added together.

These three intervals, as settled by Pythagoras, have been ever since the most important intervals in music.

The determination of the intervals of the fifth and the fourth gave a means of establishing with precision an interval of much smaller compass, namely, the *difference* between them. This was called a tone; it furnished a means for continuing the subdivision of the octave according to the diatonic system, which is a scale characterized by intervals of tones and semitones.

When Pythagoras undertook the construction of the diatonic scale, the Greeks had been using, ever since 670 B.C., two lyres, each of which had four strings, forming what was called a tetrachord. A tetrachord consisted of a semitone and two tones, forming, between the extremes, our interval of a fourth; as, for example, in our notes E, F, G, A. The first string on the second lyre sounded the same note as the last string on the first lyre, thus giving A, B, C, D. This junction-note A was considered the most important of the whole. Pythagoras's subdivision of the octave seems to have been made to fall in with the ancient prepossessions of the Greeks in favor of the tetrachord; but instead of duplicating the junction-note A, he moved the second group of four strings upward a full tone, so that the first lyre sounded E, F, G, A, as before, and the second lyre sounded B, C, D, E, thus completing the octave, and leaving an interval of a full tone between the two lyres. As each tetrachord consisted of a semitone and two full tones, and the two tetrachords separated by a full tone embraced the complete octave, it follows that the intervals in an octave must be two semitones and five full tones. Thus, if we turn to our piano keyboard, we will find the eight white keys contained in an octave are separated by five black keys. From E to F and from B to C, which are not thus separated, the intervals are semitones, being only half as great as the full-tone intervals between F to B and between C to E, which are separated from each other by black keys. The relative position of these two tones and the semitone in any tetrachord was arbitrary; any one of three combinations was possible; and, as a matter of fact they were each used by the Dorians, Phrygians, and Lydians, respectively; according to Euclid they were distinguished as follows: —

Dorian Tetrachord.	Phrygian Tetrachord.	Lydian Tetrachord.
Tone	Tone	Semitone
Tone	Semitone	Tone
Semitone.	Tone.	Tone.

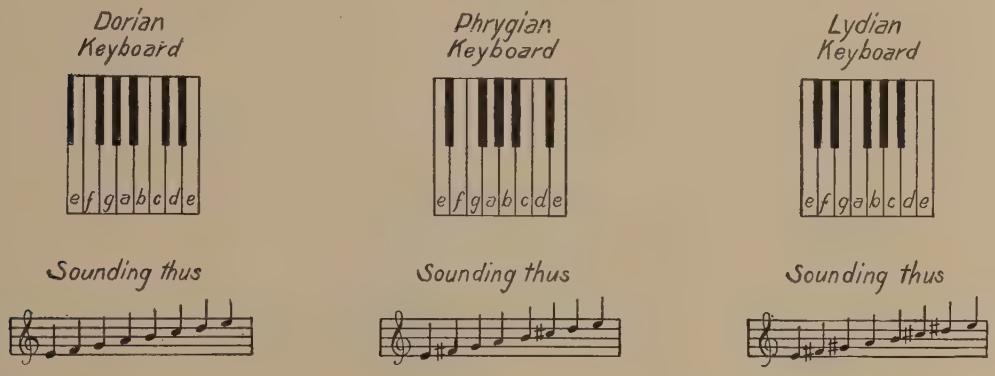
The first of these, namely, the Dorian tetrachord, appears to have been considered the most orthodox, and was in the most common use. According to this, the octave was divided in the descending scale as follows: —

From E to D– Tone " D " C– Tone " C " B– Semitone	First Dorian tetrachord.
" B " A– Tone . .	Separating the two tetrachords.
" A " G– Tone " G " F– Tone " F " E– Semitone	Second Dorian tetrachord.

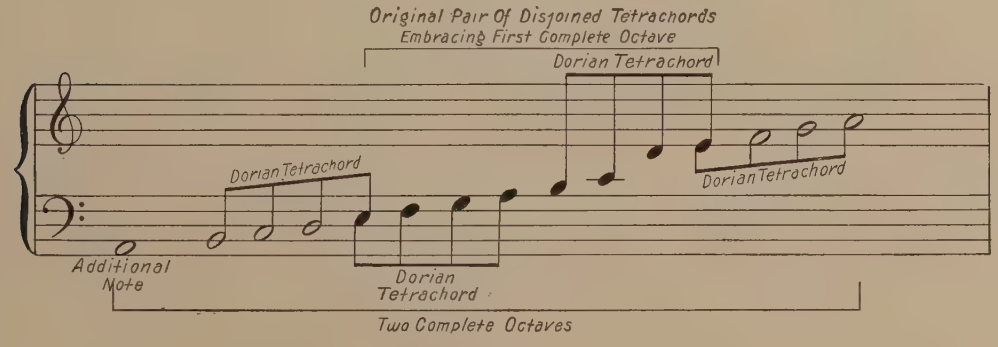
In this way the arrangement of the unequal intervals in the octave, as we now have it in our diatonic scale, was determined; and it is important and somewhat startling to realize, that had either of the other two tetrachords been preferred as a basis, the semitones in our diatonic scale would have been shifted, and the five black keys needed to complete our chromatic scale, which practically split the full tones into halves, would have been disposed in the manner shown in cut on page 69.

It will be noticed that while our diatonic scale has been arranged upon the basis of the Dorian tetrachords, the succession of sounds evoked from the Dorian keyboard does not coincide with either our major or minor modes, whereas the Lydian keyboard which *appears* to be out of joint with our

notions of propriety, would, when played upon, give us perfectly our major mode. We will shortly consider the cause of this apparent inconsistency; at present we will confine our attention to the process by which Pythagoras evolved the diatonic scale.

The principle of the octave being established, it seems obvious that by merely linking successive octaves together the complete gamut could be covered. But Pythagoras preferred to adhere faithfully to the time-honored tetrachords, and so he added one above, and another below, this time

retaining the junction-notes as shown below. Had he separated the additional tetrachords from his newly invented octave, he would have one note more at the upper end of the scale than he needed to complete two octaves. By refusing to separate them he found himself one note short at the lower end. He was like a man in bed with a scanty blanket; if he pulled it up to his chin it left his toes uncovered. In this quandary he cut loose from theory altogether, and avoided inconsistency by simply adding an extra note because he wanted to; but to make it seem sufficiently scientific he gave it a long name — "Proslambanomenos," which means "additional."

GREEK DIATONIC SCALE INVENTED BY PYTHAGORAS.



This was the enlarged system of Pythagoras, formed by combining four Dorian tetrachords with an additional note to complete the two octaves.

Quoting again from William Pole's lectures, we find that "it is obvious that in this Greek series of notes, proved to be in use about two thousand years ago, we have our diatonic scale. In fact, the notes as given here precisely correspond with the series of natural keys of our modern organ or pianoforte. This can be easily accounted for. The organ was a Greek instrument, having keys to sound the various notes as with us; and the keys

of the Greek organ would naturally correspond with the notes of the Greek scale. The organs afterwards introduced into churches were copied from the Greek ones, and our clavier instruments generally are descendants of the same family. Hence it comes that the chief keys of all these instruments correspond with the Greek series of notes; and we thus see what a respectable pedigree may be claimed for our familiar domestic pianoforte, so far at least as the white keys are concerned. The black keys are a subsequent introduction, for purposes to be considered hereafter.

"The Greeks gave each note in this scale an elaborate name. The Romans adopted the scale, but named the fifteen notes by their own Latin letters A to P, inclusive. In the sixth century Gregory recognizing the analogy between octaves of the same note, simplified the nomenclature by denoting the octave replicates with the same Latin letter, merely varying the character in which they were expressed. Thus, for the first octave he used capital letters, A B C D E F G; for the next octave above, the small letters, a b c d e f g; for the third octave the small letters thus, aa, bb, cc, and so on.

HYMN TO SELENE *A. Thomas.*

This simplification has been of immense advantage in the study of music.

"At the end of the tenth century came Guido d'Arezzo, who is credited with three improvements in regard to the scale. First, he added a note one tone below the Pythagorean proslambanomenos, or Roman A, giving this note the name of the Greek letter (gamma); secondly, to facilitate the practice of singing at sight, he abolished the old tetrachord idea, and redivided the scale into series of six notes, or hexachords, giving to the various notes of each the well-known names, Ut, Re, Mi, Fa, Sol, La (derived from a Latin hymn to John the Baptist); and thirdly, he either invented or improved the notation of the scale on lines and spaces, in a manner similar to that we at present use.

"As we come down to a date nearer our own time, we get involved in other elements which become very prominent, such as the introduction to a large extent of chromatic notes, the influence of harmonic combinations, and the indispensable condition of tonality. But the *diatonic scale has remained essentially unchanged:* as the series of notes was when Euclid described it, so it is now; and as it formed the basis of the melodies of the

Greeks two thousand years ago, so it forms the basis of the tunes of the present day.

"The above facts, explaining the origin of our present diatonic scale, are specially important, inasmuch as they bear materially on the theoretical consideration of the question.

"There is a very common, but very erroneous, notion prevalent as to the nature of the series of sounds used in modern music. Many people, and among them some thoughtful musicians, are disposed to believe that the succession of notes in our present diatonic scale is suggested directly by the laws of nature. It comes natural to them to sing the scale, and they imagine that this is the result of some natural instinct which prompts them to adopt this exact succession of notes as peculiarly pleasing and satisfactory to the ear.

"This, however, is entirely a delusion. The impulse to sing the scale arises only from education and habit; it has been impressed upon us ever since we began to learn music, and everything we have heard or performed in our lives has conduced to keep up the idea. John Stuart Mill forcibly speaks of 'the magical influence of custom, which is not only, as the proverb says, a second nature, but is continually mistaken for the first.' And so it is here.

"Several reasons might be urged against this view. One is that the tonal relations of our scale (on which the assumed natural argument is based) are quite modern. The scale itself essentially existed for centuries before this tonality was brought into common use. And, further, if the series is closely examined, there are found (as will be shown hereafter) imperfections and anomalies in it which forbid the assumption that it can be a natural production.

"Helmholtz also is strong in support of this opinion. He distinctly asserts that the formation of musical scales does not rest on natural laws, but is at least partly the result of æsthetical principles, in which the varieties of national and individual choice begin to appear.

"To prove the natural origin of the scale, it would be necessary to show that some untaught person would be led to sing it by his untutored power alone, and this is certainly what no human being ever did or could do. It is exceedingly improbable that the interval of the tone, on which the diatonic system is based, can ever have presented itself naturally to any human mind. It is very doubtful whether any person uninstructed in the modern system of music could sing a tone by the prompting of his ear alone. We are by education and long custom in the habit of singing the major tone progression, say from C to D, without difficulty; but it would be scarcely possible to get it perfectly in tune without imagining the harmony of the connecting note G. To prove this, let any one try to sing, without an instrument, a series of consecutive whole tones, say C, D, E, F♯, G♯, A♯, B♯; in which he can get no aid from the idea of harmony, and see where he will get to at the end. Indeed, even theoretically, this interval is so indeterminate that it is given two different values, according to the different circumstances in which it is used; and the minor tone would be more difficult to sing correctly than the major one.

"The semitone, which is also an essential part of our diatonic scale, is still more unlikely to be suggested naturally. It is more indeterminate than the tone, as it has theoretically several different values. And with all our education, theoretical and practical, in the present day, there is considerable dissension among musicians as to the exact points where the semitones should lie.

"It is very probable that, in those cases where primitive nations have been thought to use diatonic successions, this impression must have been more imaginary than real, prompted by the erroneous assumption that the sounds ought to correspond with our scale.

"And again, in the case of the Greek tetrachord that existed before Pythagoras, there appears on sufficient proof that the succession of sounds was of a truly diatonic nature. It was most probably Pythagoras who first molded them accurately into that form.

"But, although one must admit that the diatonic scale is not, in its entirety, the result of any natural necessity, we must not fall into the other extreme of supposing that the succession of sounds is entirely empirical and arbitrary. It contains some points that are in accordance with natural laws; and we may briefly examine the diatonic scale, as formed by the Greeks, to see how far physical principles have been concerned in its formation, and how much is due to æsthetical choice.

"And here we must be careful to avoid an error that our modern associations might easily lead us to fall into, i.e., deducing all the notes of the scale from harmonic relations. Such a process is applicable enough in the present state of

knowledge, as will be shown hereafter. But, as has been justly remarked, scales existed long before there was any such knowledge of harmony as we at present possess; and it is clear that in ancient times, when nothing but simple melody was practiced, the scale could not have been constructed so as to suit the conditions of a system, the very idea of which did not arise till a thousand years later.

"The same thing may occur in regard to our modern idea of *tonality*. The diatonic scale seems to fit in so well, with what we think right in our tonal requirements, cadences, modulations, and so on, that many good musicians have been led to imagine that its natural fitness for such purposes has led to its adoption. But here, again, it must be remembered that our prominent idea of tonality is quite modern. The Greeks had no idea of a key or keynote at all analogous to ours, and hence the diatonic scale could not have been fashioned by them to suit the inventions of a far-distant future. It is clear the scale must be judged of simply by its own inherent form without any adventitious aids.

"Considering the very simple state of music at the time the scale was formed, where are we to look for the influences that could have prompted the ear to fix on certain points and divisions of a scale for melodic sounds?

"Clearly there was but one source available, namely, *the nature of the sounds themselves.*

"Is there, then, anything in the nature of musical sounds which should lead to the definition of points in a musical scale? Helmholtz has given an elaborate answer to the question, which may be simplified as follows: —

"The most important feature of the scale is the prominence in it of the *interval of the octave:* it consists of a number of *similar cycles*, each an octave in compass, and every note has its replicates in octaves above and below. Helmholtz believes that the use of the octave was suggested by the *octave harmonics being heard in compound sounds.* He says when any melody was executed on an instrument of a good quality of tone, such as the human voice, the hearer must have heard not only the fundamental notes, but also the harmonic octaves above them, these being the strongest and most prominent of the various harmonics forming the compound tone. Hence voices would be led to *sing in octaves* to each other, and it would be recognized that the upper sounds were only imitations of what the lower ones would produce when heard alone. This, he thinks, would lead to the establishment of the *octave* as the most positive and important interval of melody.

"This explanation is reasonable, and the fact of a natural prompting to sing in octaves is corroborated by common experience. If a melody is sung by a male voice, or played on a bass or baritone instrument, a female or a boy with a tolerable musical ear, even if untaught, will have no hesitation in imitating the melody an octave higher; in fact, so great is the resemblance between the two that many people think they are alike, not appreciating the octave interval between the two series of sounds.

"This division into octaves is found to have prevailed universally in all countries and ages where music has been reduced to any kind of rule.

"We next, however, come to a more difficult problem, namely, the *subdivision* of the octave; and this in respect the first feature that strikes us, in regard to the diatonic scale, is the *irregularity* of the division. It is certainly a question that requires consideration, why the most natural mode of equal and uniform divisions was departed from in this case?

"The answer, no doubt, is, that uniform divisions would not have been easily appreciable by the ear. It would be very difficult for any unaided voice to divide an octave into a number of equal parts. The ear would have no guide at what point to hit the division. Hence it is much preferable to search for some *dividing-point* in regard to which some ear-guide can be found; and Helmholtz decides that there is such a point, namely, at the interval of the *fifth.* He points out that in compound sounds the harmonic most prominent after the octave is the twelfth; which forms, with the octave, an interval of a fifth, and is therefore capable of suggesting the interval of the fifth to the ear. He remarks, in corroboration, 'This is the reason why unpractised singers, when they wish to join in the chorus to a song that does not suit the compass of their voice, often take a *fifth* to it. This is a very evident proof that the uncultivated ear regards repetition in the fifth as natural.'

"When, therefore, Pythagoras found that this interval of the fifth dictated by nature was given by the next simple division of the string to that of the octave, — namely, by dividing it into three parts, — he could not fail to see the appropriate-

ness of confirming the fifth as the second standard interval, and it served as a very convenient point for commencing the subdivision of the octave.

"The division of musical sounds, first into cycles of octaves, and then with a lesser subdivision by fifths, appears to have been not peculiar to the Greeks, but to have been adopted by almost all nations who had any pretension to systems of music. And this corroborates the idea of these guiding-points being dictated by nature.

"The next step in the subdivision of the octave is the determination of the *fourth*. This stands in a somewhat different category, as the natural harmonics give no suggestion of a fourth above the fundamental. The origin of this point in the division is therefore more artificial, but still it may be easily accounted for on simple principles.

"When the interval of the fifth is once fixed in the mind, there is no difficulty in applying it *downwards* as well as upwards; and if we suppose a fifth measured downwards from the top note of the octave we get a point which is a *fourth* distant from the bottom note. In fact, the fifth and the fourth are complementary to each other, and the fourth can be easily *inferred* when the fifth is determined.

"Pythagoras found that this new interval was given by three-fourths the length of the string; and although the point was not dictated by his ear, like the fifth, he had no difficulty in fixing the fourth as a second convenient subdivision of the octave scale, so dividing it into two symmetrical tetrachords, as already explained. There is a tradition that the most ancient of all the Greek lyres had four strings, tuned according to the four notes obtained in this way, i.e., c-f g-c. And if so Pythagoras was anticipated in his main divisions of the scale.

"It appears to have been a result of the investigations of Pythagoras that the Greeks, although they may not have used combinations of notes analogous to our harmony, did acquire some notion of the harmonic relations of the principal consonant intervals; for Euclid alludes to the consonant blending of a higher with a lower tone in the three cases of the octave, the fifth, and the fourth, as distinguished from all other intervals.

"It remains to consider the minor subdivisions. The two gaps of the fourth were too large; in order to make melody, more notes were wanting, and the gaps had to be filled up in some way.

"But here no natural guide was found to direct the ear what intermediate notes to choose, and all farther was left to be settled by purely arbitrary means. For this reason many variations have been used in the subordinate divisions.

"We have already seen how Pythagoras filled them in, namely, by the application of his artificial interval of the tone; and as a matter of theory, there is nothing more to be said on the matter, so far as his scale is concerned.

"The origin and nature of our diatonic scale, so far as the succession of its intervals is concerned, is thus made clear; but this is not sufficient, for we have yet to notice a peculiar feature which is essential to its modern application. We do not use the series of sounds indiscriminately, but treat them in a certain form of combination. We select one of the seven notes of which the diatonic scale is composed (for the entire series, whatever its extent, may be assumed to consist only of octave replicates of seven sounds), and we invest this note with a special significance, making all the other six subservient to it, under mutual relations, which are of much importance in the structure of modern music. This selected note is called the *keynote* or *tonic*, and the system of relations that hangs upon it is called *tonality*.

"In investigating this feature of music, our first step must be to search for any element in the Greek system which had an analogy to it, or which may be considered to have been instrumental to its introduction. And we find such an element in what are called the Greek *modes*.

"In the best times of Greece, song was usually accompanied by an eight-stringed lyre, which embraced the compass of an octave; i.e., the highest and lowest strings sounded the same note an octave apart. Then came the question, how the intermediate six notes should be arranged? For, adhering to the diatonic progression of intervals, a little consideration will show that the notes might, by putting the hemitones in different positions, be arranged in seven different ways.

"Thus, representing the interval of a tone by T, and that of a hemitone by H, we might have the seven intervals between the extreme notes arranged in either of the following ways: —

1. H T T H T T T
2. T T H T T T H
3. T H T T T H T
4. H T T T H T T
5. T T T H T T H
6. T T H T T H T
7. T H T T H T T

E. Grützner.

TRIO IN THE CONVENT.

MUSIQUE SACRÉE

By G. Dubusse.

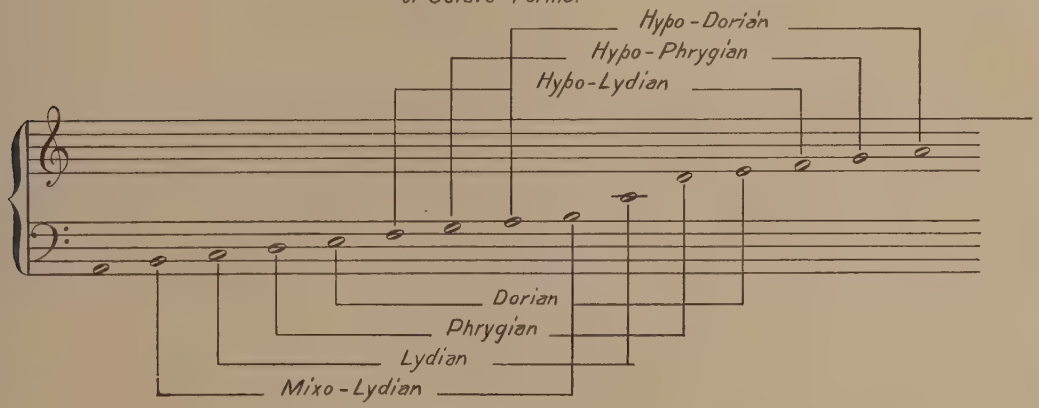
"We are familiar enough in the present day with these varieties of arrangement of notes in diatonic succession within the octave, which are called *modes*. Everybody who has had to do with ancient ecclesiastical music must be acquainted with the several varieties of 'church modes,' which correspond in their nature with those now under consideration. And not only so, but we have, in modern music, two 'modes' of the same kind, the *major mode* and the *minor mode;* the distinction between which consists in a different arrangement of tones and semitones in the octave scale. These latter may be at once identified with two of the varieties in the above table, our major mode being No. 2, and our minor mode (in its natural or descending form) being No. 7. Hence we are justified, according to the nomenclature which has been in use ever since the days of Ambrose and Gregory, in speaking of the seven different arrangements shown in the table as so many different *modes*, according to any of which the diatonic octave lyre might be tuned.

No. 1	was termed	Mixo-Lydian.
" 2	"	Lydian.
" 3	"	Phrygian.
" 4	"	Dorian.
" 5	"	Hypo-Lydian.
" 6	"	Hypo-Phrygian.
" 7	"	Hypo-Dorian.

"The last of these was the most common. It had in ancient art an importance analogous to that which the major scale has acquired in modern

Diagram

Illustrating the Nature of the succession of intervals in the various Greek Modes or Octave Forms.



music; and ultimately it became the only one used.

"The names of the octave-forms subsequently underwent alteration, and at a later period lost their original import, as will be hereafter explained.

"It was customary for writers to illustrate the nature of the variations in the modes by a reference to the complete diatonic scale; for by putting the extreme notes of the octave in suitable places, it is possible to embrace portions of the scale between them which shall represent every variety of octave-form.

"The above diagram shows how this is done, and gives the name attached to each mode.

"It must not, however, be inferred from this diagram that the several modes were necessarily taken at the pitches there given; they might be taken at any pitch.

"We may now go a step farther.

"Taking the eight notes of any one of the Greek octave forms (or rather the seven notes, for the upper one is only a repetition of the lowest one), the question may naturally arise, Were all these notes of equal importance, or was there any one in particular that might be distinguished as the principal one?

"This question is suggested by the great prominence and importance of the *keynote* in our present musical system. It is natural to ask whether any

such idea existed in the old music, and, if not, when and how it came into vogue?

"In regard to the Greek music, we find a special importance given to the middle string. Aristotle describes it as influencing the intonation of the other strings, and adds that in all good compositions it was used the most frequently. It then becomes a question, what position the *mese* occupied in the modal scale or octave form. Westphal infers, from passages of Ptolemy, that it was always the *fourth* above the lower note; and he founds on this some ingenious speculations as to the construction of melodies and their harmonic treatment. Other writers give a special importance to the lower note itself, in which they believe it was customary to cause every composition to end. But there are no positive data on these points, and therefore we must be content to consider the information in regard to the prominence of any one note in the Greek music as vague and obscure.

"In the early ecclesiastical music, the reference to a principal note in the scale becomes somewhat more definite. In regard to the four original 'authentic' modes or scales of Ambrose, we find the rule clearly established that melodies in which they were used should *end on the lowest note of the scale.* Hence this note became the important one, a sort of *tonic* to a certain extent analogous to ours; and in all probability this was the first dawning of our present tonal system."

Bearing in mind that in a series of eight consecutive notes, if the lowest note is regarded as the fundamental or tonic, and if the intervals of the fifth and the fourth are to be perfectly maintained in relation to same, it will be seen that whenever the semitones are placed so that this is impracticable, the mode fails to fulfill the requirements of modern tonality. The Mixo-Lydian mode (No. 1) has an imperfect fifth, and the Hypo-Lydian (No. 5) an imperfect fourth; so both give imperfect results, and therefore became obsolete as soon as tonality began to assume importance. The remaining five modes may all be considered good and proper tonal scales, as they permit of sounding the octave, the fifth, and the fourth. But three of them have become obsolete, because they were not so well suited to the requirements of modern harmony as the remaining two. On the principle of "the survival of the fittest," the Hypo-Dorian (No. 7) and the Lydian (No. 2) lived on, while Phrygian (No. 3), Dorian (No. 4), and Hypo-Phrygian (No. 6) succumbed. And thus it is that while the Dorian (No. 4) gave birth to our diatonic scale, and left its impress on our keyboard, it could not compete with Lydian (No. 2), which "appears to be out of joint with our notions of propriety." (See p. 68). Indeed, this same Lydian mode, which is now our modern major mode, has a very disreputable record. It was taken possession of by the Troubadours of the Middle Ages, and identified by them with unsavory suggestion, so that it was held in contempt by the churchmen, who called it the *modus lascivous*, or wanton mode. Yet when tested by the requirements of harmony, it proved itself to be the most useful of all, and for the last two centuries the greater part of our modern music has been written in this mode. We have here an example of plebeian merit, winning its way against patrician incompetency.

The modern minor mode corresponds to the Hypo-Dorian (No. 7), and was formerly used in secular music and particularly for national or popular melodies. The old church modes (Nos. 3, 4, 5, and 6) have all been consigned to oblivion, and the religious music of to-day is written in the two modes which were formerly regarded as either secular or immoral. This is a fact which should be pondered upon by those who believe certain forms of music to be intrinsically sacred or profane.

Quoting again from William Pole, we find that: "Along with the harmonic element came in a much more perfect establishment of the predominant importance of the fundamental note of the scale, or *tonic* as it came to be called. Compositions were not only made to end in it, but the harmonies were so arranged as to have continual reference to it, and so to keep it constantly in the mind as a sort of standard to control and regulate the whole. The influence of this principle became more and more prominent, until in the last century it became firmly established as one of the most essential elements of musical composition. It is difficult now for ordinary musicians to conceive even the slightest musical phrase otherwise than as identified with a particular key.

"One of the best English writers on music, Mr. Hullah, has paid much attention to the history of this feature. He estimates that the old form of tonality, that of the modes of the church, copied from the Greeks, was in vogue till about 1600; that then came about one hundred and fifty years of *transition*, during which the feeling for harmony

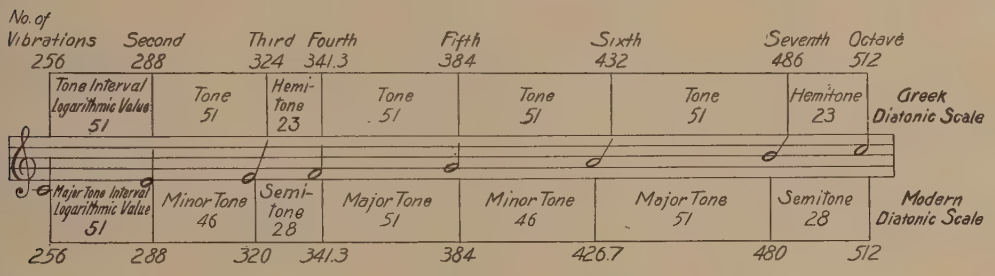
was gradually acting in the transmutation of the old system and the preparation of the new; so that it was not till about the death of Händel or the birth of Mozart that the modern tonality took firm root, and became established as we now have it.

"It is strange to think that a feature which we now deem one of the most positive necessities of music should be only about a century old; but this is only another warning how careful we ought to be not to be misled, in arguing about the theory of music, by modern habit and education.

"It is doubtful whether the imperative adoption of modern tonality is an unmixed good, for it cages us in a somewhat narrow circle. Even the minor mode we do not give its full scope, for in some respects it is altered to assimilate it to the major.

"The following remarks by Hauptmann on this point are worth quoting: —

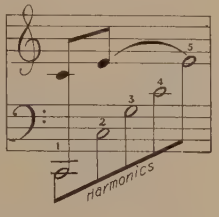
"'Many of the choruses in "Israel in Egypt" acquire an entirely peculiar coloring through the old modes in which they are more or less strictly written. We have already discussed how often, in modern music, the boasted richness of harmony is confined to the poverty of two chords, the tonic and dominant, which, notwithstanding all modulation into far-removed keys, only reappear transposed; whereas Bach, while remaining in one key, can find material enough to develop the richest variety by using not only these two, but all harmonies that lie in the scale. Something similar appears to me to exist in the distinctions between our modern major and minor and the old modes; the former lead to mere transpositions of one and the same series of notes, whereas the latter are, by the difference in the steps of their scales entirely distinct from each other, and have each consequently a decidedly marked character. Händel has taken advantage of this — the chorus No. 11 being entirely Phrygian, No. 21 being mostly Dorian, so far as the



treatment of the scale is concerned. This sort of thing ought not to be thrown aside as useless lumber; it might do good service in opposition to the insipid sentimentality of modern taste; it tends to enforce strength and power.'

"It is by no means impossible that composers of genius might some day open for themselves a considerable field for novelty and originality by shaking off the trammels of our restricted modern tonality; and that they might find scope for the development of the art in some kind of return to the principles of the ancient forms, which at present are only looked down upon as obsolete remnants of a barbarous age."

Returning once more to the first question as to why the intervals in the modern diatonic scale are placed just as they are, we find that so far as the octave, fifth, fourth and second are concerned, they correspond precisely with the Pythagorian scale. The subdivision of the octave in the Greek scale was made by simply dividing its logarithmic value into five tones, each having a value equal to the difference between a fifth and a fourth, and then dividing what remains equally between two hemitones. This subdivision is closely followed by the modern diatonic scale, but there is a difference caused by the requirements of tonality and harmony. Were it not for this, our diatonic scale would, no doubt, be identical with the Lydian mode of the Greek diatonic scale. The above diagram compares the two scales, and marks the differences between them.

Thus it will be seen that the pitch of the third has been lowered four vibrations per second, making it three hundred and twenty, which coincides exactly with the over-tone produced by the fifth harmonic of a fundamental note two octaves below the first note in the above scale, — thus,

Again, the sixth has been lowered from 432 to 426.7 vibrations per second, and the seventh from 486 to 480 vibrations per second.

The fifteenth harmonic of this same fundamental note has a vibratory rate of nine hundred and sixty per second, and is therefore exactly an octave above the seventh in question (480 × 2 = 960.) Thus two of these three changes serve to bring the scale into direct harmonic relation with the tonic or keynote. The only note which fails to thus fall into line is the sixth, which does not coincide exactly with any over-tone, although it comes fairly close to the thirteenth harmonic. Its position in the scale, like that of the others, is governed by the following rule: —

Every note in the scale must have, as far as possible, concordant harmonic relations to other notes; and in determining these, the relations of the tonic or keynote are the more important.

If we compare these harmonic relations, we shall find them properly consonant, thus: —

C to E is a true major third	E to A is a perfect fourth
C to F is a perfect fourth	E to B is a perfect fifth
C to G is a perfect fifth	E to C is a true minor sixth
C to A is a true major sixth	F to A is a true major third
C to C is a perfect octave	F to C is a perfect fifth
D to G is a perfect fourth	G to B is a true major third
D to B is a true major sixth	G to C is a perfect fourth
E to G is a true minor third	A to C is a true minor third

Had we adhered to the Greek diatonic scale, instead of getting these sixteen perfectly consonant harmonic combinations, we would have been obliged to get along with less than half this number.

But even with this improvement we do not get perfection. For example, from D to A does not give us a perfect fifth, being perceptibly flat. If we were to undertake to cure this by raising the A, we would throw it out of tune for the subdominant chord, F A C; or should we lower the D, that would spoil the dominant chord, G B D.

Again, from D to F ought to be a true minor third; but it sounds flat by one-fifth a semitone, and we cannot raise it without making trouble elsewhere.

In both these cases it has been a choice of evils, and in each case the lesser evil remains. The fact is that no instrument having seven fixed notes in the scale can be always *in tune* for sounding all the possible harmonic relations which the seven notes bear to each other. To accomplish this we must have some of the notes *variable in position*, or we must have three alternative notes for D, F, and A to cover their dual relation to the other notes.

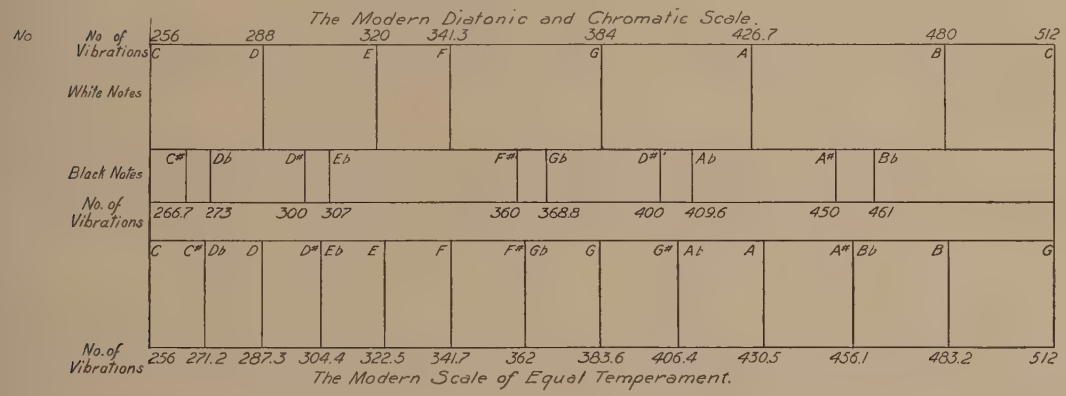
These imperfections tend to confirm the statement that the diatonic scale is conventional and artificial, and not a natural product. It lends itself easily to certain naturally harmonious and agreeable combinations of tones, but it is essentially imperfect by its very nature and construction.

Thus far we have considered only the diatonic scale as represented by the white keys of the piano, but there still remain the five black keys to account for and explain. These, in combination with the white notes, form the "chromatic scale." They fulfill a double office in our musical system. Their first and most important use is for the purpose of modulation necessitated by the demands of tonality. In order to play the scale of the major mode in any key, it is evident that we shall need either to shift the positions of the semitones, or to provide new notes to take the place of those omitted. As the positions cannot be shifted, we are compelled to add the new notes. Thus, if we commence the scale on G, we shall have no use for the white key F; but we shall need a note between F and upper G to get the interval of a semitone, which the major mode invariably demands at this point in the scale. Or if we begin the scale on D, we shall not need to use the white keys F and C, but in their place must provide new keys, giving semitones between C and D and between F and G. By the time we have provided a sufficient number of additional notes to enable us to place the semitones wherever they are required, in order to exactly maintain the intervals by which these sixteen perfectly consonant harmonic combinations may be sounded in any desired key, we shall find ourselves, like the old woman who lived in the shoe, with so many little ones to provide for, that we shall have gotten as far as puzzled. Familiarity with the manual of the piano leads us to think that the black key between two white keys is the sharp of the note below it and the flat of the note above it. Now, although a black key is used as a flat or a sharp, according to circumstances, this is because, to avoid fearful complexity, we have decided to sacrifice pure and correct intonation for the sake of mechanical simplicity. Were it not for this sacrifice, we would have to add ten instead of five black keys to the white octave. But even after shouldering this burden, we would find it necessary, in order to get perfectly just intonation in all the keys, to have many of the seventeen

different notes thus comprising the octave in duplicate and triplicate. Under these circumstances, it has seemed expedient to force some sort of a compromise by means of which one key may be compelled to fulfill the office of two or more. This has resulted in what is called the modern scale of equal temperament, and consists in simply dividing the octave into twelve equal semitones. It was familiar to the Greeks; but its modern use began about the middle of the sixteenth century, when it was introduced by Adrien Willaert, a Belgian composer. The accompanying table shows how this compromise has thrown every note in the scale out of its proper place, except the octave interval. Even the sacred "fifth" has dropped four-fifths of one vibration, and the "fourth" has gained four-tenths of one vibration. These intervals have suffered the least, but in some cases three or four vibrations per second have been borrowed from Peter to pay Paul.

There is but one justification for this scale of equal temperament, and that is *necessity*. If keyed instruments are to be employed, it will be practically impossible to manipulate all the keys that must be added in order to preserve the fine distinctions of tone between the notes in their variable harmonic relation. With stringed instruments and in vocal music these distinctions can, and should be, preserved, — as, indeed, they are by fine performers.

Having now answered the question as to why the tones which have found a place in our musical scale are thus honored, we will proceed to consider



briefly the manner in which they are used to produce music.

The first essential for all music, whether it be crude and simple, as we find it among barbaric races, or refined and complex as among the most cultivated modern musicians, is *rhythm*. The savage beating his tom-tom makes no attempt at either melody or harmony, but he has taken the first step in a musical education that leads to the conductor's desk in a symphony orchestra. The natural law which governs this phase of our subject is very far reaching. It has to do not only with music, but with every department of human knowledge and experience. It is one of the primary and fundamental laws of the universe. Herbert Spencer, in his "Synthetic Philosophy," demonstrates that one of the "First Principles" in the law of Evolution is the "Rhythm of Motion." The stars in the heavens, the waves of the sea, the wind, the rain, sound, light, heat, electrical action, animal energy, human thought and feeling, all have a rhythmical action. Nothing moves in a simple straight line, but it has an undulatory motion more or less complex. He says, "Music in still more various ways exemplifies the law. There are recurring bars in which there is a primary and a secondary beat. There is the alternate increase and decrease of muscular strain, implied by ascents and descents to the higher and lower notes — ascents and descents composed of smaller waves breaking the rises and falls of the larger ones, in a mode peculiar to each melody. And then we have, further, the alternation of *piano* and *forte* passages. That these several kinds of rhythm, characterizing æs-

thetic expression, are not, in the common sense of the word, artificial, but are intenser forms of an undulatory movement habitually generated by feeling in its bodily discharge, is shown by the fact that they are all traceable in ordinary speech, which in every sentence has its primary and secondary emphases, and its cadence containing a chief rise and fall complicated with subordinated rises and falls; and which is accompanied by a more or less oscillatory action of the limbs when the emotion is great. Still longer undulations may be observed by every one, in himself and in others, on occasions of extreme pleasure or extreme pain. Note, in the first place, that pain, having its origin in bodily disorder, is nearly always perceptibly rhythmical. During hours in which it never actually ceases, it has variations of intensity — fits or paroxysms; and then after these hours of suffering there usually come hours of comparative ease. Moral pain has the like smaller and larger waves. One possessed by intense grief does not utter continuous moans, or shed tears with equable rapidity; but these signs of passion come in recurring bursts. Then after a time, during which such stronger and weaker waves of emotion alternate, there comes a calm — a time of comparative deadness; to which again succeeds another interval, when dull sorrow rises afresh into acute anguish, with its series of paroxysms. Similarly in great delight, especially as manifested by children who have its display less under control, there are visible variations in the intensity of feeling shown, — fits of laughter and dancing about, separated by pauses, in which smiles, and other slight manifestations of pleasure, suffice to discharge the lessened excitement. Nor are there wanting evidences of mental undulations greater in length than any of these — undulations which take weeks or months or years, to complete themselves. We continually hear of moods which recur at intervals. Very many persons have their epochs of vivacity and depression. There are periods of industry following periods of idleness; and times at which particular subjects or tastes are cultivated with zeal, alternating with times at which they are neglected. Respecting which slow oscillations, the only qualification to be made is, that being affected by numerous influences, they are comparatively irregular."

Now, if we remember that music, like speech or dancing, is but one of the methods by which we express our emotions, and that our emotions themselves are rhythmical, it becomes evident that music, poetry, and dancing must keep time with the feelings they seek to express. The simpler the emotion, the more regular and well-defined will be the rhythm in which it is expressed. The animal vitality which prompts the thoughtless dance requires nothing more than the rhythmical beating of a tom-tom. As dancing develops to a finer art, it demands subdivisions of the rhythm, and eventually becomes a symmetrical structure. When the element of sentiment is introduced, this structure becomes more complex, as, for instance, the dreamy waltz. Rising still higher, the human heart finds expression for its hopes and fears, joy and anguish, triumph and despair, in a multitude of musical forms, in each of which the rhythm of the feeling finds its proper expression in the rhythm of the music which, to be most effective, must "beat time" in unison with it. Compare the simple rhythm of a polka with the wonderfully complex rhythm of a symphonic poem; the former is the expression of a very simple state of feeling, and can be fully expressed by a simple rhythm. The latter is the expression of a tumult of feelings which surge, and sway each other, until they seem to almost lose their rhythmical action; but the music which can give them voice will, under all the superficial confusion, obey the law of rhythm which controls their action.

Thus is it that our musical scale must be used rhythmically; and the mathematical divisions into simple and compound, common and triple time, with all the terms relating to speed and emphasis, are merely the outward rhythmical expression of the inward rhythmical emotion to which the composer seeks to give a voice.

It is hardly necessary to add that the same law which requires music to be rhythmical determines the form of every composition. The grand sweep of a symphony, like the majestic swell of the ocean, obeys the same law of rhythm that controls both the simplest phrase of the one and the smallest ripple of the other. The mental undulations of which Herbert Spencer speaks, that require "long periods in which to complete themselves," find expression in the aggregation of simple rhythms, which, being compounded and otherwise elaborated, are interwrought and unified into a structure that, as a whole, gives expression to the complete mental state. Thus, to put the matter in a nutshell, music beats time in synchronism with human emotion, which is rhythmical, and therefore music must itself be rhythmical. We do not dance

because the music is rhythmical, but the music is rhythmical because we dance.

Let us return to our friend the savage beating his tom-tom, who will perhaps at times long for something more soul-satisfying than the rhythmical monotones thus evoked, and watch his next step in musical culture. His companion has a tom-tom also; and neither of the two instruments being tuned, they of course differ in pitch. At first this may go unnoticed; but finally, when the interval between them happens to be a fifth or an octave, the performers smile expansively, for they recognize a familiar sound which pleases them *because it is familiar*. These intervals are the lullabys with which Mother Nature sings her wild children to sleep; but without knowing why they are thus affected, they decide that a pair of tom-toms *thus attuned* are better than one. In course of time they improve the tone of their instruments, and increase their number until they have five, capable of sounding the pentatonic scale corresponding with the black keys of our piano-forte. Thus equipped they commence playing tunes or melodies, some of which have enormous popularity, while others give no pleasure to anyone; and indeed an occasional succession of these five tones is produced which causes the auditors to nervously finger their tomahawks. Now it is merely a question of the possible combination for five definite tones sounded in rhythmic succession. Why should one tune differ from another in glory? Why should one please, another prove indifferent, and a third offend? These questions have been often asked and debated upon, but no one has answered them satisfactorily. Sir George Airy, in his work on sound, hazards an opinion that "the same ratios of vibration which, when combined, conduce to pleasing harmony, may, when existing between consecutive notes, be also pleasing in melody." This is no doubt true so far as it goes, but it fails to account for many pleasing melodies where this ratio does not appear. Helmholtz says, "The aesthetic analysis of complete musical works of art, and the comprehension of the reasons of their beauty, encounter apparently invincible obstacles at almost every point." The subject is no doubt a difficult one, and yet the most potent cause for these differences seems to have been entirely overlooked. We have seen that the human ear welcomes the sounds to which it has been attuned by nature. The natural harmonics are grateful because the ear has, so to speak, been molded by evolution to fit them. The earliest melodies must have been confined to these harmonics; and the extension of the pentatonic scale, by the addition of a second and sixth to the harmonic intervals of octave, third and fifth, was probably regarded at first as a disagreeable innovation. But tastes are acquired by innovation, and confirmed by habit, until they become inbred; and with persistent and long-continued schooling the ear may be molded to fit any succession of musical intervals, however disagreeable they may seem on the first hearing." "We first endure, then pity, then embrace." We are pleased with what is familiar, and shrink from things new and strange, but are continually enlarging our acquaintance.

Now let us see if this fact, that we are pleased with sounds to which we have become accustomed, will help us to explain why some melodies are pleasing, and others indifferent or displeasing. Why does not the same rule apply equally to musical intervals forming the scale and to musical intervals as they follow successively in a melody. In both cases we like to hear *familiar* sounds, whether they be scales or tunes; and we shrink from combinations new and strange in either case. A melody when analyzed will be found to consist of certain intervals or short phrases that may be brought together in different combinations, so as to form a great variety of tunes, just as words are used to form a sentence. So far as we are acquainted with the words thus spelled, they please the eye when we see them on the printed page; but we shrink from a word we never saw before — say for instance the word XYSTER, which is in the dictionary, and will seem less ugly after you have used it a few thousand times, and added it to your daily vocabulary. Whenever a "taking" melody is produced, it will be found that it is composed of familiar phrases. It is a common trick for the writer of popular songs to appropriate certain phrases which have won their way to public favor, and by a slight change in rhythm, key, and tempo, palm them off on an unsuspecting public as something new. In this way, "Where Art Thou Now My Beloved" is served up as "The Mulligan Guards," and a long list of such successful resurrections might be given. This is sometimes done deliberately, but usually the composer is innocent of any intent to purloin. He merely uses the strains that are floating about through his mind — the flotsam and jetsam which have drifted in from the great sea of melody beyond the bar. So long

as the composer confines himself to making new melodies out of old phrases which the public have accepted with favor, he will not offend; but let him invent some phrase which has not been thus stamped with the seal of public approval, and he will meet with a cold reception. If he can succeed in making the public listen to it often enough, *under conditions which are generally agreeable*, the new phrase will eventually be added to the general stock of pleasing phrases, and reappear in many "new" melodies by other composers. But if the conditions are not generally agreeable his new phrase will not survive, for it is by *the law of association of ideas* that musical phrases, like colors and odors, derive their powers to please. Tennyson puts the question thus:

> "Who can tell
> Why to smell
> The violet, recalls the dewy prime
> Of youth and buried time?
> The cause is nowhere found in rhyme."

The cause may be discovered by philosophy, however; for such suggestions are probably due to the association of ideas inherited from past generations. The savage running about the woods, and painting himself blue, might smell violets till they withered, and no thought "of youth and buried time" would ever occur to him. The freshness and fragrance of the violet are associated in our minds with youth, because they have for generations been a favorite flower with our young people, and are associated in our minds with occasions when youth and innocence held sway. Again, by the association of ideas the youth of the individual suggests the youth of the race, and this cannot be thought of without thinking of "buried time." Who can smell an orange blossom without thinking of a wedding, or a tube-rose without the suggestion of a funeral. But if orange blossoms had always been laid upon the coffin, and tube-roses intwined in the bridal wreath, the suggestions would have been reversed.

Now, in the same way certain musical phrases have become surcharged with suggestions of joy, grief, patriotism, peace, and so on through the entire gamut of human emotion and sentiment. We have inherited the power to perceive the connection between certain musical strains and certain states of feeling. When the connection was first made, the power of suggestion must have been very feeble, but by frequent repetition and long continued use it became very powerful. Who can hear his national anthem without a stirring pulse? Mendelssohn's Wedding March spontaneously recalls the picture of a bridal procession; and the "Dead March from Saul" makes every soldier shudder, for he sees at once a deserter being led forth to be shot. Each of these melodies has acquired its significance by the association of ideas with sounds, and none of them possesses much inherent appropriateness. If this statement seems too strong, we have only to remember that patriotic and popular melodies were composed by the Greeks in the same minor mode that we now use for dirges and penitential psalms, whereas our major mode, in which the "Star Spangled Banner" is cast, was put to such base uses by them that it would have inspired them with nothing but contempt.

If, therefore, we carry the law of the association of ideas, the force of which must be recognized in its application to entire melodies, back one step, and apply it to the phrases of which these melodies are composed, we shall begin to understand in a general way why it is that some melodies please, others prove indifferent, and others offend.

Returning once more to our friends with the tom-toms, we find that their progress in musical culture has been accompanied by a general advance in the refinements of civilization. They have washed off their war-paint, and are clad in graceful flowing Grecian togas; and instead of pounding their five gongs with a hammer, they delicately pluck the eight strings of the double lyre, and sing in unison many pleasing melodies. They do not attempt to sing or play more than one note at a time, however; in other words, they know nothing about chords or harmonic progressions. They accompany the singing voice by playing the lyre strictly in unison with the voice. In doing this they notice that the female voice, although an octave higher than the male, will blend perfectly well with a single string on the lyre. This suggests that octaves may be sung or played in unison, and the improvement is forthwith adopted. They are familiar with the harmonic intervals of the octave, fifth, and third, sounded successively, and they make the experiment of sounding them together; but the result being unfamiliar to their uneducated ears, they pronounce it a failure, and for a long time will have nothing to do with such strange and uncouth sounds.

A writer named Censorius (a fine name for a musical critic!) who lived at Rome about 240 A.D., says: "In music there are only certain intervals

which can produce symphony, which is a *simultaneous combination* of two different sounds. The first or simple symphonies are three in number, one having an interval of two tones and a semitone, and called *diatesserōn* (fourth); another of three tones and a semitone, called *diapente* (or fifth); and the third, *diapasōn* (octave), which contains the two former."

Along in the tenth century a Flemish monk named Hucbald wrote that a melody could be accompanied by taking the same melody,

in octaves above or below,
or in fifths above,
or in fourths above,
or in fifths above and fourths below,
or in fourths above and fifths below.

If the reader will try this recipe on "Home, Sweet Home" he will begin to realize to what extent the human ear of to-day has been molded by training and convention to accept certain combinations of notes as harmonious, and reject others as dissonant. Helmholtz says in this connection, we "judge old music by the rules of modern harmony, and are inclined to consider every deviation from it as mere unskilfullness in the old composer, or even as barbarous want of taste." William Pole says, "There is nothing physically repugnant in a succession of fifths. If a melody is either sung or played on any instrument with a brilliant tone, the octave and twelfth are very prominent in the accompanying harmonics or overtones; and it follows that an accompaniment of consecutive fifths is an

THE FALSE NOTE. *A. Kindler.*

order of nature, and cannot, therefore, be condemned by natural laws. Consecutive fourths are still less unlawful; they are admitted in modern music without scrupie."

Shortly after this, or early in the twelfth century, a farther step was taken, when, instead of confining the accompaniment to fixed intervals above or below the principal *canto fermo*, independent parts were written, each of which, while forming a complete musical phrase by itself, might be sung or played simultaneously with the others. This is what we call counterpoint, and it is still held in high esteem. It is practically a series of different melodies moving along together; and in order to avoid dissonance, it became necessary, when two or more notes were sounded simultaneously, that they should be in harmonic relations. For this reason certain rules were established which, although not

made to govern our system of modern harmony, nevertheless, have been imported into it; because both counterpoint and harmony are based upon the same broad principle of harmonic relation. Of course the prime object of the composers was strictly contrapuntal, *viz.*, to write independent parts, the chief merit of which should be that, while maintaining their individual character, they would, when sung simultaneously, blend agreeably together. The parts were usually in perfect concord, otherwise the ear would have rebelled; but occasionally, in the exigency of making both ends meet, dissonant combinations were allowable, provided they conformed to certain conditions as to their motion and sequence. The rule in modern harmony which forbids consecutive fifths and consecutive octaves had its origin in the requirements of contrapuntal writing, which called for the simultaneous performance of *different* melodies. Now, if two of the performers should sing consecutive octaves, it is evident that while thus engaged they would be practically singing the same melody, one an octave above the other, and therefore the prime object of counterpoint would be defeated. Helmholtz points out that while consecutive fifths are not disagreeable to the natural ear, that twelfths (which are practically the same as fifths, being an octave above the latter) when used as a consecutive accompaniment merely strengthen the fundamental sounds, and do not add any new independent element to the harmony; and hence an accompaniment in twelfths or fifths likewise defeats the requirement of independent melodies. Richter objects to consecutive fifths, because "Every form of chord which is included chiefly between its root and fifths like a circle, let it otherwise be constituted as it may, represents in itself a *closed whole*. And since harmonic connections can only be effected by one chord passing into and upon others, it is evident that two chords with such fixed boundaries, fifth after fifth, cannot pass into each other, but must, when they stand side by side, appear unrelated and unconnected.

"Whenever, therefore, a perfect fifth appears, it will carry with it its character of limitation; and the disagreeable quality of the succession of two perfect fifths will be found in their want of connection — in their isolation."

It is quite evident that the rule against consecutive fifths was based on the same ground that forbade octaves and unisons, namely, the essential similarity between the two parts that professed to be dissimilar.

It will be seen that the development and elaboration of contrapuntal writing, pursued exclusively for its own sake and without any thought of modern harmony, nevertheless led up to the latter, and to a certain extent is identical with it. Take some well-written four-part song in close harmony, and isolate any one of the four parts, and it will have a fairly well defined melody of its own. Dr. Hullah contrasts ancient contrapuntal and modern harmonical music by describing the former as *horizontal* and the latter as *vertical*. The flowing melodies of counterpoint run along in parallel lines horizontally, while in harmonized chorals the notes are built up in columns that stand on end side by side. Thus harmony may be said to be counterpoint in vertical section, and counterpoint to be harmony in horizontal section.

Thus during the fourteenth, fifteenth, and sixteenth centuries the fundamental principles of modern harmony were being gradually evolved from counterpoint. The idea of *harmony independent of counterpoint*, i.e., of *progression of chords* without reference to the horizontal movement of the parts, did not appear until the beginning of the seventeenth century. It probably commenced with the attempt of church organists to accompany a soloist by imitating the absent voices with something that would give a contrapuntal effect. To guide themselves, they wrote out the melody as a bass, and put figures over the notes to indicate the proper *intervals* between the notes to be thus supplied as an accompaniment. This was the origin of *Thorough Bass*, and it soon became a special study with rules of its own, independent of counterpoint. The first published treatise on harmony was by Giuseppe Zarlino, in 1558. The first theoretical writer, who, adopting the principle of independent harmony, reduced it to a connected and logical system, was Jean Philippe Rameau, in 1722. Before him publications on the subject were entirely practical, and consisted solely of rules and directions how to put music together, without reference to the principles upon which such rules were founded. His theory, though it had a philosophical foundation, did not go far; but since his book appeared there have been a host of writers who have stretched his simple principles to the breaking-point, in their vain effort to discover a natural basis for the whole complex structure of modern harmony. Their efforts have been unavailing because the rules of harmony, like the rules of grammar, are artificial and provisional,

and change from generation to generation. They are based on precedent, being simply the usage of the best writers. When a great genius like Beethoven encounters a rule which forbids him to express his thought he simply breaks it, and in due course of time everyone else follows his example. Then the broken rule is discarded, and a new one takes its place, permitting the very thing formerly prohibited. And so, as time goes on, we find the systems of harmony changing to meet the wants and wishes of public taste. Helmholtz says: "The system of scales and modes, and *all the network of harmony founded thereon*, do not seem to rest on any immutable laws of nature. They are due to aesthetical principles, which are constantly subject to change, according to the progressive development of knowledge and taste. It is clearly a false position which teachers of harmony have assumed in declaring this or that to be *forbidden*. In point of fact, *nothing musical* is absolutely forbidden, and all rules for the progression of parts are actually violated in the most effective pieces of the greatest composers."

Instead, therefore, of attempting to base all the rules of harmony on strictly scientific principles, we must be content with trying to discover *what amount of natural basis* can be found for them; and if we find a large residuum which we shall be unable to thus account for, we must either await a better knowledge and a clearer insight, or relegate it to the domain of aesthetics, where scientific reasoning is at present unable to follow.

It would be impossible, within the limits of this article, to set forth in sufficient detail the scientific analysis of simple and compound harmonies, together with their harmonic progressions, and to identify in each case the natural basis for the rules governing them. This has been admirably done by William Pole, F.R.S., in his "Philosophy of Music," 1879, upon whose work the present writer has already drawn somewhat freely in presenting his subject.

Nothing remains now but to consider briefly the differences in a musical tone which the ear distinguishes as *intensity* and *quality*. We have found that pitch is accounted for by the rapidity of the vibrations in the body producing the sound. So many back and forth movements of a string mean a given pitch. The intensity or strength of the sound evoked will be in direct proportion to the amplitude of vibration. If the distance traveled by the vibrating string is slight, the sound produced will be comparatively feeble; if the distance is increased, the sound will be relatively greater. The same law governs all vibrating bodies, whether they be strings, bells, or trombones. And so if we want a loud tone, we pluck, or strike, or blow with added power, because this will cause our instrument to move with increased energy, and cover a greater space in each vibration — or, in other words, increase its amplitude.

The cause of differences in quality of tone is not so simple. In explaining the selection of the particular pitches employed in the construction of every musical scale, we were compelled to refer to the cause which produces differences in quality; viz., while every vibrating body has a simple movement as a whole, it also has a great many subsidiary movements, which, although joining in the general swing back and forth, have an independent swing of their own. These subsidiary movements, we have seen, produce what we term harmonics, or overtones. So far as pitch is concerned, the number of these overtones which exercise any influence is very limited, the first sixteen being all that bear any practical relation to pitch. But it must not be supposed that the subdivision which produces these overtones stops here. Thousands and thousands of these superposed tones may be added to a fundamental tone, and each added one changes the quality of such fundamental. It is said that some voices that are very rich in overtones contain as high as thirty thousand of these accompanying tones, each of which is an harmonic. Some day an instrument may be invented which will analyze every tone, just as a chemist analyzes a complex substance, and gives a tabulated statement of its component parts. Such a table would show that a certain note on the violin, for instance, contained such and such overtones (several thousand of them) combined in such and such relations as to intensity; for it is not only the number of overtones in a given sound, but the predominance of some of them over the others, that makes the quality just what it is in any given case. The same note on the flute would give a different acoustic analysis; there might be a different number of overtones or their relation to each other as to intensity might differ; probably both factors would be active. And so on with each musical note on every instrument, — the difference in quality could be tabulated and expressed mathematically. In short, *the character or quality of a musical sound depends upon the number and the*

proportionate strength of the partial tones of which it is composed.

In attempting to present so comprehensive a subject within the space assigned him, the writer has been compelled to confine himself to broad outlines, passing over much that would prove very interesting and instructive to the musical student who is not content to acquire a merely technical knowledge of his art, but wishes to know as much as possible about its fundamental principles. The influence of such increased knowledge cannot fail to make itself felt in many ways that are not easy to predict. The flower of art derives its vitality from the trunk of philosophy through the branches of science, and its proper cultivation depends upon an intelligent understanding of the "tree of knowledge."

Arthur J. Mundy

CUPID'S ORCHESTRA. *A. Gill.*

Music
and Health

MUSIC AND HEALTH

By LOUIS C. ELSON

IN considering music in its physiological and physical aspects it is well at the outset to define the art. Fetis has spoken of music as "the art of moving emotions by combinations of tone," but this states but a half-truth. Much music exists which has very little or no effect upon the emotions. The music of the fifteenth and sixteenth centuries made but little attempt to excite the feelings; the composer's endeavor at that time was to appeal to the intellect, and the auditor was expected to study with some degree of care and mental effort the combinations which were presented to his mind. It would be more proper, therefore, to state that music is the art of moving the emotions, or exciting the intellect, by combinations of tone.

When Congreve wrote, "Music hath charms to soothe the savage breast," he voiced a truth; but again it is not the entire truth, for music hath charms that can soothe not only the savage but the lower animals as well. It is a mistake to suppose that music is entirely a natural science. Its elements, to be sure, are found in nature, but their application is not. Nature does not suggest to us the simplest harmonic or melodic progression; and the subdivision of a scale, or the formation of a melody, is rather an artificial than a natural process. One might say, therefore, that music is an artificial product based upon a natural foundation.

The natural foundation of the art is in Tone, Chord, and Rhythm; and when we speak of the fondness of animals for music it is as well to remember that they are influenced rather by these elements than by any of the higher devices of the art. The regular vibration of a tone would appeal to many animals and insects; a spider might show interest in the tone, and one might proceed even farther down the scale of creation and still find response to these simple vibrations.

A chord is also given us by nature, as will be seen in the article on the "Philosophy of Music" of this volume. But the "chord of nature" does not suggest progressions or harmonic combinations; these were invented by man.

Almost all animate creation yields to the spell of Rhythm; in fact, all animate creation is in itself rhythmic, pulsating in its heart-throbs, and existing by its regular pulsations. The effect of rhythm upon animals has been proved by innumerable experiments. An intelligent horse will readily learn to step to a definite rhythm; and elephants, dogs, etc., have been frequently exhibited who had developed this faculty to a surprising degree. Swine and donkeys have been discovered to be the most deficient in the appreciation of rhythm.

If rhythm exerts so definite an influence upon the lower animals, it may be imagined that an especial influence is exerted upon mankind. The physical influence of rhythm is indeed a most marked one; and musical rhythm can be employed to cure such ailments as find their root in an interruption of that regular rhythm which is implanted in the human species. Stuttering, for example, is not often present if the victim sings his remarks; the regular vibration of tone and pulsations of rhythm seeming to exert instantly a beneficial influence upon the malady; and it is not too much to say that the continued practice of singing tends to ameliorate this disease, and might, under certain favorable circumstances, effect an entire cure.

St. Vitus Dance is another instance of interrupted rhythm in the human species, and is also amenable to the influence of tone and rhythm. Often one can find the victim of this malady entirely tranquil when engaged in singing. Probably all music would exert some beneficent effect upon the above two maladies, but singing would exert the most direct and appreciable power, since here the patient is engrossed in producing the

actual sounds, and their vibrations are felt throughout the system.

It is only in recent times that physicians have turned their attention toward the practical, physical, or psychological effects of music; but some progress has already been made, and it is not unlikely that music will yet enter as definitely into *materia medica* as quinine itself. Psychologically music works directly upon the emotions; physically its regularity of vibration exerts a soothing effect upon the mind. That music was employed thus in ancient times there can be no manner of doubt. The scriptural instance of David soothing the insane King Saul by music finds its counterpart in the courtiers of Charles IX. sending for Orlando Di Lasso, the great Flemish composer, to soothe the conscience-stricken royal murderer by the exercise of his art.

One can find innumerable examples of the use of the physical effects of music among savages. In every tribe throughout the world the medicine-men unite their mysterious art of healing with the

DAVID PLAYING BEFORE SAUL. *H. F. Schopin.*

sounds of music, and if this music be entirely hideous and unattractive to civilized ears, it is none the less generally rhythmic and conveys regular vibrations. The universality of the employment of music in this connection ought at once to prove that it is not mere quackery and humbug, for certainly not all of the medicine-men of savage nations would have hit upon the same mode of influence for all patients, were there not some underlying scientific principle in the custom.

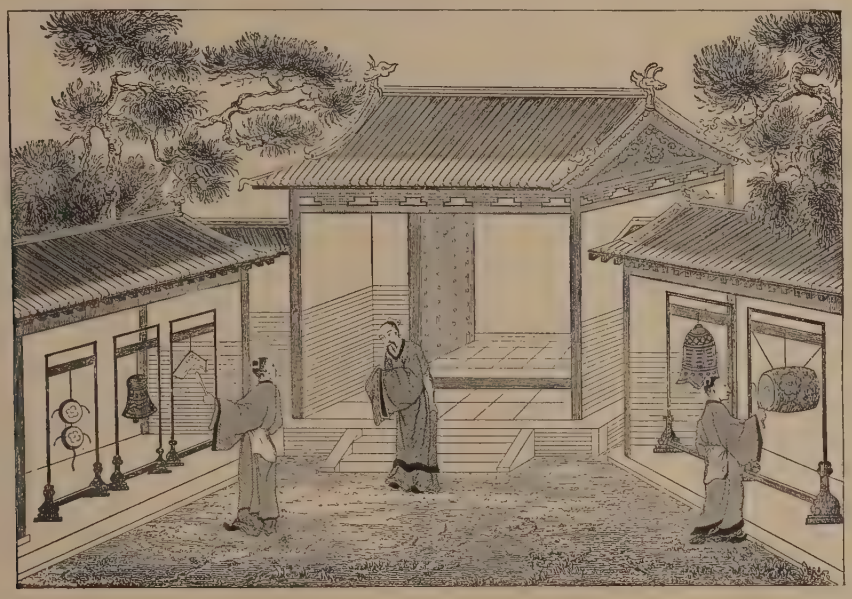
The effect of music upon savages is often very great. Sir Samuel Baker, in his book of African Travels,[1] says that a man would be safer in going through the heart of Africa with a hand-organ than with a band of soldiers, so susceptible are the natives of the Dark Continent to the sound of music. Indeed, Sir Samuel was often annoyed by excessive demonstrations of delight which the negroes showed when his band of musicians played; and he says that it was with difficulty that the mu-

[1] Ismailia, by Sir S. W. Baker, p. 282.

sicians were rescued from the embraces of their ardent admirers.

Although it may be accepted as a fact that all human kind is musical in some degree, yet there is a marked difference between races in this respect. We have seen that the negro in his savage state is very musical; the American Indian is far less so, and seems content to stop short at the most primitive rhythmic productions. At the threshold of our subject we must cling closely to the definition of music given in our preamble. The intellectual side of music will be absent from the compositions found among semi-civilized people; the savage will demand chiefly the rhythmic impulse in some degree, occasionally also the emotional. So long as the most crude progressions can produce an emotional effect upon anyone, these progressions become music to that person.

In the eighteenth century a French Jesuit endeavored to win the Chinese to their conversion by the power of music. Père Amiot, for that was our missionary's name, was musically gifted, and endeavored to ingratiate himself in the hearts of his Chinese friends by playing the best European music to them on many different occasions. In spite of the compliments which form so large a part of Chinese etiquette, the pious father noticed that there was a degree of boredom present dur-



Instruments placed by Yu at the entrance of his palace, China, 2205 B.C.

ing his efforts. At last he begged of one of his most intimate Chinese friends, a mandarin in the personal service of the emperor, to tell him frankly what he thought of his music. The answer is interesting: "Your European music," said the mandarin, "is full of ingenuity and of very complicated construction; but it cannot go to the heart and move the feelings as our Chinese music does!" When one remembers that the Chinese music, to our ears, seems to be a most noisy and caterwauling production, it will readily be understood that the old Latin phrase, "*De gustibus non est disputandem*," applies to music with most peculiar force, the musical meat of one nation being the poison of another.

A peculiar and especially medical use of music exists in some parts of Italy, in connection with the bite of the poisonous spider called the tarantula. When a peasant is bitten by such a spider and the rigor of tetanus (a persistent spasm of the voluntary muscles) has set in, his comrades play lively rhythms to him and excite him to dancing. This mode of procedure has often been doubted; but a tolerably detailed account of a cure by this musical means was sent to an Italian medical journal in 1841, in which the symptoms

are graphically described. The patient was at first unable to stand upon his feet; but a lively dance tune caused him to leap from his bed and caper about to the rhythm for some two hours, after which he fell down exhausted, in a profuse perspiration, was put to bed again, and slept quietly. The proceeding was repeated a few times, and the result was a complete cure. It is possible that any other strong sudorific might have attained the same beneficent result; but the fact remains that the patient responded readily to music, even from a comatose condition. The dance called the "Tarantella" (a rapid $\frac{6}{8}$ rhythm) takes its name from the fact that rapid music was played in mediaeval times to cure such illnesses.

There are many points in the ancient use of music which are worth noting. In ancient Egypt the system of music seemed to be derived in some degree from the symmetry of nature. The planets in their courses were believed to make a celestial harmony, and the earliest scale was founded upon the supposed tones of these planets. Pythagoras was supposed to be the only mortal who could hear these tones, and some six hundred years B. C. he evolved a scale which ran as follows: Moon, Mercury, Venus, Sun, Mars, Jupiter, Saturn; and of these the Sun was the central controlling middle note around which all the others circled. Pythagoras, although a Grecian, was admitted to the Egyptian rites of priesthood, and unquestionably this natural derivation of music was taken by him from an Egyptian source. When he returned to Greece he made music an obligatory part of his cult. Playing upon the lyre was demanded of all his disciples, and none of the order went to sleep at night without having first purified his spirit by means of music; and at rising in the morning music was again played to fortify the soul for the labors and vicissitudes of the day. Pythagoras is said to have written special songs as antidotes to undue excitement and extreme passion, and it is even reported that he once subdued a young man who was in a frenzy caused by jealousy and wine, by the power of song.

The physical connection between music and color is one that has not as yet been fully discovered; it is unquestioned that color is vibration, as is music, but the tremendous gap between the slow vibrations of sound and the quick vibrations of color is one that can scarcely be spanned by the human intellect. The highest tone audible to the human ear has about thirty-eight thousand vibrations per second; the lowest color visible to the human eye has about four hundred and sixty trillions of vibrations per second. None the less, many composers fancy a close resemblance between tone and actual color; as yet this resemblance must, however, be relegated to the realm of pure fancy. No two composers who believe in this color of tones seem to agree upon the hues which should constitute their scale. And it may be borne in mind in this connection that (the octave always doubling the vibrations) audible pitch can give more than eleven octaves to the ear, while visible color presents not one single octave to the eye, the lowest color (red) having four hundred and sixty trillions of vibrations per second, and the highest color (violet) having but seven hundred and thirty trillions.

A direct connection between music and health is found in the influence of melody upon homesickness or nostalgia. Truly national music reflects the home-life of nations, hence, certain melodies charm very greatly by association of ideas. Many an auditor imagines that he is being charmed by music when the real charm is the memory of his native land or of his youthful companions and occupations. So strong is the influence of music in this direction that certain melodies have been prohibited in times of war and in the stress of certain campaigns. "Way down Upon the Swanee River" was not allowed to be performed in some of the camps in Virginia when the troops were in winter quarters during the American civil war; Napoleon was obliged to prohibit certain Swiss tunes during his campaigns, since the melody of the *Ranz des Vaches* brought up the entire mountain life to the imagination of his Swiss troops, and they deserted when they heard it. During the Sepoy mutiny "Lochaber No More" was prohibited, since it caused the desertion of many a Scotchman. It seems, therefore, that national music excites rather than appeases homesickness.

Having studied the effect of music on the mind, it may now be proper to study the working of the brain in producing or listening to music. The ear itself must be regarded as only a conductor of the vibrations to the brain. The outer ear may be regarded as the tone-gatherer, focusing and reflecting the vibrations toward the aural passage. It is a singular fact that in pre-historic times man

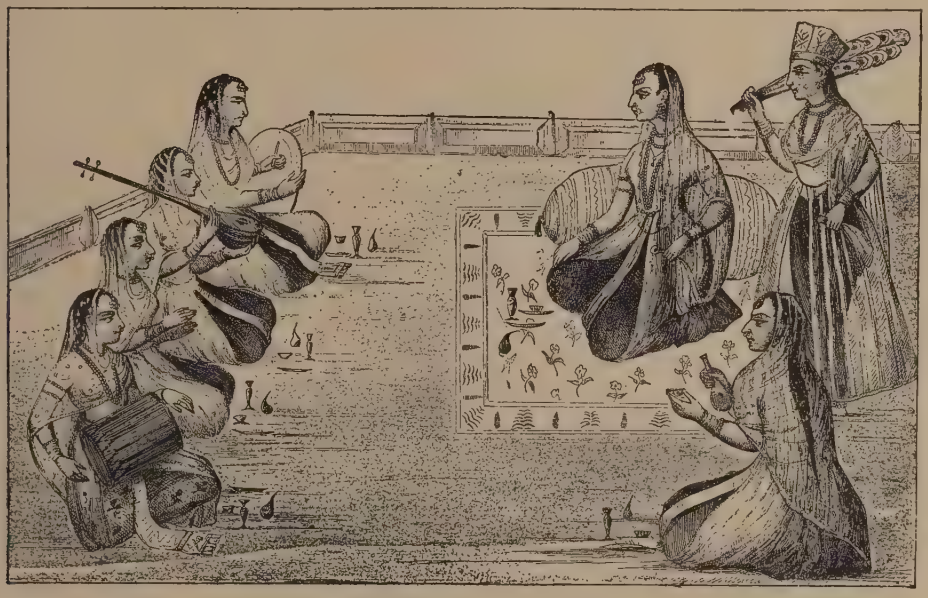
THE MINUET

From painting by E. L. Garrido.

used this outer ear far more constantly than is the case at present. Just as we see the antelope or the hare prick up its ears when hearing some suspicious sound, so once did man turn his ears to and fro to catch the vibrations which might mean danger or valuable prey, in paleolithic times. It is considered a matter of curiosity to see the human being wag his ears at present, yet once upon a time every human ear was quite flexible, for the purpose of thoroughly concentrating all vibrations.

The middle ear may be regarded as a sounding-board; it is the so-called "drum" of the ear, and like the drums explained in "Orchestral Instruments" the ear-drum has its hole, in the Eustachian tube.

The inner ear may be regarded as the telegraph office of the apparatus of hearing. The sounds which have passed the ear-drum are sent by sympathetic nerves to the brain and there recorded. The brain itself has fifteen thousand five hundred receiving offices for these tones, — tiny "hair cells" in which two fibres are crossed in peculiar fashion, which vibrate in sympathy with the nerves which have sent in the tone. These myriads of cells have by no means been fully employed even



CONCERT BEFORE A PRINCESS, IN INDIA.
After a miniature in a Mss. in the Bibliothèque Nationale.

in the most musical mind. One-fiftieth of a semitone is the smallest deflection of pitch which the brain can perceive at present; yet, judging by the number of cells, a much closer deviation ought to be appreciated.

Probably the human brain is seldom called upon to act in a more complex manner than in memorizing music; in this process many different series of cells are called into action: the musician has looked many times upon the printed page of music, and this has impressed itself upon the visual cells of the brain, and often these are called into action in remembering a musical work. Some artists use these almost exclusively. The highest musical memory would be a recollection of the ideas and progressions of the music. Here we have a logical process performed by the brain, and this might be called the most musical manner of memorization. Again, if the work be a piano or organ composition, the player may recall almost unconsciously the peculiar motions made by his hands, the extension of this or that finger, the placing of the thumb under, or the finger over, in a passage, and thus the motor cells add their influence to the memorization of music.

Another branch of music-memorization is that known as "absolute pitch." Many musicians can identify a note upon hearing it. This is a memory

which has come to them through the constant audition and comparison of musical tones. It is a subject worthy of scientific investigation, and one which has not yet received sufficient attention, to trace how far tone-color enters into this memorization of pitch. Tuners and violinists have generally the best sense of "absolute pitch," and this is because they have constantly engaged in observing minute deflections of tone. But play to the violinist a trombone tone and his mental process will be a comparison of this tone with a violin tone before he completely catches the pitch. He has memorized the pitch upon his own instrument, and the first image presented to his mind is the tone as given by his violin. The blind, because of their constant attention to sound, are generally very superior in this matter of absolute pitch.

Since music is so closely interwoven with memory, it is natural to suppose that a lost memory (amnesia) might be restored by the influence of music; this has actually been the case in certain instances where the memory had temporarily failed.

There are certain occult connections between the action of the brain and the appreciation of music that have not yet been fully investigated or explained. The case of Von Bülow is one in point; he was a child of nine, and not of an especially musical temperament, when he received a severe injury, falling upon his head and fracturing his skull. A long illness followed, and finally he recovered; and after leaving his sick-bed he showed an intense appreciation of music. After his death a dissection of the brain showed that he had sustained a permanent injury, and that the ends of two nerves were embedded in the cortices.

The mysterious connection between music and the brain does not end here; the dissection of Rubinstein's skull showed the forehead to be one-half a centimeter in thickness; such thickness is usually found only in skulls of idiots; in this case, however, it seems not to have hindered the development of the brain.

Phrenology finds itself greatly at fault in the matter of music. Beethoven's skull, judged by phrenological standards, is found to be an unmusical one.

In the performance of complex and compound rhythms the musician's brain has a task to perform that is especially difficult. The sending out of two different motor messages at the same time is almost impossible, yet the musician is expected to be able to play at times one rhythm with his right hand and another with his left. Many teachers have found great trouble in teaching this dual performance to their pupils, and with some fairly intelligent musicians it is an impossibility.

In intricate cases of double rhythms, one hand must be trained automatically while the brain watches and directs the motions of the other.

Absolute exactitude in playing notes simultaneously with two hands is an impossibility, although the musician may think differently. Prof. Edward W. Scripture has made a series of experiments in Yale College upon this matter, and has found that where the musician imagines that he is striking two notes simultaneously there is really an appreciable interval of time between them. Placing a telegraph key under each of the hands of the musician, he was told to press both exactly at the same time; he believed that he did so. To these telegraph keys there was attached an apparatus showing records to one thousandth of a second; a big spark coil with batteries was connected with each key, with two metal points resting on a revolving drum, this latter being covered with smoked paper. The moment each key was pressed a spark was made from its pointer, and a tuning-fork was so arranged that the distance between these sparks was recorded in one thousandth of a second. The musician pressed the two keys, and was certain that both went down exactly at the same time, but the record showed that the left hand was fifteen thousandths of a second behind the right!

A step farther was taken; a piano player was placed at the keys with a telephone attached to his ear. He was to press the left-hand key the moment that a deep tone came to him through the telephone. He believed that he pressed the key exactly at the moment that the tone came; as a matter of fact it was generally one-fifth of a second after the receipt of the tone that the key was pressed.

Another more complicated problem. The pianist is again seated at the telephone; when he hears a deep tone he is to press the left-hand key; when he hears a high tone he is to press the right-hand key. He is now to distinguish and discriminate between two things and then choose between two acts. The result is even slower than the preceding experiment.

Another curious brain action in connection with music has only recently been investigated by

physicians. It is the fact that the musical capacity may be lost from various pathological causes. The disease is strictly analogous to aphasia,—loss of ability to understand speech and to exercise it. The disease takes peculiar forms, in some of which the notes cannot be appreciated by the ear (tone deafness); in others the notes cannot be read by the eye (note blindness); and motor forms in which the patient cannot sing play, or write the notes.

The appreciation of musical pitch is a subject that requires careful investigation. A number of children sing before they speak, and it is not uncommon to find idiots with a very imperfect control of language who can grasp melodic forms with much ease.

It would be a matter of interest to ascertain what causes have operated in the formation of what may be called the "national voice" of certain countries. The subject has received little or no attention as yet from scientific investigators; yet it is a definite fact that certain nations tend to certain pitches of voice; climate, food, conditions of life, may all contribute toward this result. It was at one time supposed that the mountaineer's "Jodel," in the Tyrol and the Swiss Alps, was due to a peculiar conformation of throat, but dissection has disproved this. The female "national voice" of America, is distinctly soprano; the female voice of England a full-toned contralto; the female voice of France a mezzo-soprano; high tenors are copiously found in Spain, and it is a curious fact that Gaditanian singers were sought for in the courts of ancient imperial Rome; Russia is brim-

THE VINTAGE FESTIVAL. *Alma Tadema.*

ful of heavy-toned bases, and each nation seems to present some especial vocal characteristics worthy of investigation.

The fact that the Chinese take such delight in the shrieks and yells of some of their singers, and in the clatter and din with which these are accompanied, has led a few theorists to hazard the guess that their ears were differently constructed from those of Caucasian races, particularly in the "drum" and inner ear; but dissection has completely disproved this conjecture.

But the Chinese music is not much more abnormal than some of the ancient music must have been. The accounts which are left us of music in ancient Greece and Rome, show a love of noise that is unparalleled, and the music of old Jerusalem must have also been upon a fortissimo scale, the very words "Play skillfully and with a loud noise," going to prove this; and when Josephus speaks of a performance in the holy city, in which two hundred thousand singers, forty thousand sistrums, forty thousand harps, and two hundred thousand trumpets took part, we may not swallow the entire story, but we must believe at least that the old Hebrews were fond of massive effects in tone production.

In Athens we have proof of this same love of power; for the fashionable young men of that city had certain songs called "Orethian," which were written entirely upon the highest notes, and must have demanded much effort on the part of the vocalist; and just these were the most practiced of vocal selections. The Phonarci, in Athens, were teachers of both singing and elo-

cution; and some of these teachers were obliged to warn their pupils not to overstrain in their songs and in the open air contests lest they bring on convulsions and rupture.

Something of the medical side of the vocal teacher's art is left to us from ancient Greece and Rome in Suetonius, Tacitus, Quintilian, Valerius Maximus, and other writers. The orators, who probably chanted more than we at present suspect, used a demulcent containing Gum Tragacanth, and often employed cubebs as we do to-day. Certain kinds of fish and leguminous vegetables were also held in favor, and onions and garlic were much prized by the singers. Cold drinks were carefully avoided, and Thyme-oil was used as it is by modern physicians. Sometimes the singer was compelled by his teacher to lie flat upon his back, and breathe steadily with heavy sheets of lead upon his stomach, to strengthen the diaphragm. Nero used emetics and clysters freely whenever his voice seemed at all out of order, and forbore from eating pickles and certain acid fruits because they were judged prejudicial to the vocal organs. In Athens, five centuries before Christ, the chorus singers were accustomed to have their laws of diet prescribed for them by the choragus.

The out-door music must have been furiously loud, and the indoor songs drearily long. Nero's songs frequently lasted from four to six hours. At the public games the trumpeters were proud of occasionally bursting a blood vessel by their exertions. Harmonides, a young Greek flute-player, expired with his first note at one of these competitions, but achieved a fortissimo effect that left a very favorable impression upon the public. The trumpet music is said to have far exceeded all other kinds in its power, and Herodorus of Megara is said generally to have stunned his audiences by the concussion of his stentorian tones; and when he played two trumpets at once, which he sometimes did as an extra attraction, the audience was obliged to remove to a greater distance than usual because of the tremendous sound. And this ancient leather-lungs gained prize after prize to the exclusion of all other trumpeters in Greece.

We now approach that mystery of mysteries, the musical ear; there are some strange phenomena connected with the ears of musicians as well as with their audition cells in the brain. Mozart has given proof of the possession of a most remarkable ear for deflections of pitch. It is a fact worthy of record that the aural passage was, with him, of very diminutive size. Many composers have been afflicted with deafness. Beethoven will at once come to mind when one speaks of this particular affliction; but his deafness seems to have been a constitutional disorder, and inherited, and therefore was not due to his musical work; (see Dr. Clarence J. Blake's article, "Famous Composers," Vol. I. page 333). Robert Franz was afflicted with a peculiar deafness in advanced years, a malady which began by his hearing the shrill piping of a locomotive, and which ended in almost total loss of hearing. Schumann in his latter days was afflicted with that symptom of insanity known as "false hearing," and imagined a note (A) constantly sounding and forming an organ point to melodies and harmonic progressions. Among peculiarities of audition may be mentioned Mozart's terror at a trumpet sound in his boyhood, and Chopin's early dislike of piano tones.

It is a peculiar fact that occasionally one meets people of much intelligence and otherwise cultured, who are totally insensible to the charms of music; nor is this to be taken as a proof of any particular baseness of soul. Shakespeare's statement in the "Merchant of Venice" runs:

> "The man that hath no music in himself,
> Nor is not moved by concord of sweet sounds,
> Is fit for treason, stratagem, and spoils,
> The motions of his spirit are dull as night,
> And his affections dark as Erebus;
> Let no such man be trusted."

But it will be remembered that this statement is made by a young lover, and one of Shakespeare's lesser characters; in Shakespeare's own works we find Othello and the noble Harry Hotspur disliking music. In actual life we find Charles Lamb wondering at the affectation which caused people to go into ecstasies over a succession of tones; Dean Swift expressing his astonishment that

> "Such difference should be
> Twixt tweedledum and tweedledee."

We discover Dr. Samuel Johnson caring little for the art; and we find the poet Tennyson almost tone-deaf, unable to recognize special musical stress and generally avoiding musical allusions.

The Paris Journal, "Figaro," a few years ago made some investigation into the lack of musical sense among great personages. These are a few of the results: —

Beaumarchais wrote the famous phrase, "The stuff that is not worth writing is good enough to sing"; Theophile Gautier exclaimed, "Music is the most expensive of noises"; La Fontaine cared nothing for music; Fontenelle used to say that there were three things in this world he could never understand, — gambling, women, and music; the great Napoleon said that music troubled his nerves, yet, like a practical man, he did not discard the advantages of music from a military point of view, and at one time ordered the bands of different regiments to play every day in front of the hospitals to encourage the wounded; Victor Hugo rarely was pleased when his verses were set to music. "Are not my verses," he exclaimed, "sufficiently harmonious to stand without the assistance of a disagreeable noise?"

If, on the one hand, we find persons of superior intelligence absolutely bereft of musical sense, on the other hand, many commonplace minds are discovered which yield to the influence of music in the most marked degree. In this connection one may contradict the very poetical idea that musicians should be higher natures, more virtuous, more exalted, than those of more common clay, who are not responsive to the seduction of tones. It would be the simple truth to say that music is the most emotional of arts, and that the musician is more emotional, and responds more quickly to subtle impressions, than those who possess more stolid nerves. This would certainly make him more excitable; it might occasionally make him better than the average of mankind, but it might also make him worse.

One may dislike music for two reasons, the first a purely physical one. It is stated that a certain doctor in France, who could not bear music, once accidentally covered up one ear during a performance, and the music suddenly became to him a revelation of beauty; the two ears of the unfortunate man differed in some occult manner, and gave conflicting impressions to his brain. Marechal, who quotes the case, believes it to be very rare. The other and more frequent cause is of an intellectual character (as was the case of Catherine II. of Russia), and such cases are almost hopeless as regards curability.

De la Charrière, the eminent French surgeon, believes that the absence of a musical ear is of a cerebral, and not of an intellectual order. Intelligence is the resultant of the ensemble of our cerebral faculties; and it may be of a high order, although the regions or cells which preside over the movements of the musical sense may be insufficiently developed. We find in the case of certain individuals, who appear exceptional, what we term "dominants"; for instance, a musical impression intense in the case of a musician, a visual impression exceptional with the painter, but their intelligence does not extend beyond the average; on the other hand, among persons gifted with remarkable intelligence, we do notice an absence of of those special faculties which are dominant in certain subjects. It seems that there is a vacuum in these organisms; but if we are unable to determine exactly the region where that vacuum exists, we ought for that precise reason to give up all claim to supply the want.

The writer himself once had occasion to observe a peculiar lack of sense of tone and scale progression in a very intelligent Brahmin who desired to study the European musical system; in testing his sense of progression the writer played a scale, stopping at the leading tone, and then played the same scale, finishing with the octave. On inquiring of the Hindoo which he thought the more complete, he responded that both seemed equally complete to his ear!

It is of interest in the development of this subject to trace the extreme influence of certain compositions upon their composers. Occasionally we find works produced under great nervous stress. Chopin's A flat polonaise was first improvised when the composer was in a state bordering upon frenzy; he had quarreled with George Sand, and was sitting in his room in Paris brooding at the piano; as he developed the composition, he seemed to see a procession of Polish nobility stream by him.

Sometimes a composition may be absolutely fatal to its composer. "Elijah" is said to have been the cause of Mendelssohn's death, and Haydn, by over-taxing his strength in writing "The Seasons," brought on the disease which ended his days; Bizet was crushed by the composition, and possibly the poor reception, of "Carmen"; and "Zampa" is said to have caused the collapse of Herold.

Composers and conductors are especially liable to disease of the eye. The near-sightedness (myopia) of musicians is proverbial. It proceeds from two causes: firstly, the general study of trained musicians is almost endless; secondly, the eye of the musician is used in an abnormal manner

in reading almost all music. The pianist is reading two separate lines at the same time; the score reader, the orchestral conductor, is reading at times from half a dozen to a dozen lines almost simultaneously. Händel and Bach were both blind in middle age.

The insanity of composers may proceed directly from that emotional sensibility which has already been described. Schumann and Smetana died in asylums, and Von Bülow was also mentally unbalanced at different times in his career.

It is pleasant to turn from this gloomy aspect of music to an examination of the practice of the art as a direct means of health. Singing may be regarded as the most perfect and all-embracing kind of gymnastics, and it may yet be used as a

ANGEL PLAYING LUTE. *Carpaccio.*

Detail from the meeting of St. Anna and St. Joachim.

curative agent in many diseases which now are treated only by drugs or by the surgeon's knife. Ulceration of the tonsils, the primary stages of consumption, some phases of catarrh, can certainly be benefited, and may possibly be cured, by very careful and hygienic singing.

Hygiene of the voice should be studied by everyone with weak lungs, or who is subject to troubles of the throat and nose. Nasal breathing in itself would cure more illnesses than many people imagine.

It is peculiar to note that professional singers very frequently pin their faith upon certain preparatives for vocalism. If they agreed in the nature of these, the information regarding them might be of great value to the world, but scarcely any two

use exactly the same stimulant for the vocal organs. Cold tea, tea with lemon, sherry, sherry beaten with egg, champagne, raw oysters, and even a salt pickle, are among the articles which the writer has seen used by great artists before stepping upon the concert platform. Many agree in the use of a salt-water gargle morning and night. Cocoa is by common consent the best drink for the vocalist. Heat-producing food is generally healthy for the singer, if, as is usually the case, he has a good digestion. A singer can generally eat more in quantity, and more fatty foods, without ill result, than any other mortal.

It seems to be conceded that the constant use of certain muscles by musicians involves a change in their tissue. The nature of this mysterious change has never been fully ascertained. John Hunter, the eminent surgeon, once said that he would give a thousand pounds for a pianist's hand, — meaning that the dissection of such a hand would clear up a surgical mystery. The vocal chords of the singer undergo a visible change that can be noted by means of the laryngoscope. The bands which in the non-singer are white, in the vocalist have become a pearl gray.

The physical effect of different instruments upon their performers has not yet been fully investigated. Reed instruments when played by lip, as with the oboe, or by mechanism, as with the cabinet organ, seem to excite the nerves in some degree. The prohibition of brass instruments to vocalists arises from the different use of the lips, — the vocalist requiring flexible lips, the brass-instrument player stiff lips, the edges only being flexible. A tribute to the health of brass-instrument playing is found in certain Italian statistics, which prove that in twenty years not a single trombone player in that country died of lung disease.

It may be proper, in concluding this essay upon the connection of health and music, to enumerate the illnesses which carried off some of the greatest of the musical composers. Bach died as the result of an attack of apoplexy brought on by excitement at the return of his sight, after years of nearly total blindness. Both Händel and Haydn died from a complication of diseases consequent upon old age, although Haydn's death was hastened by earnest musical labor. Mozart died of typhus fever — and a very incompetent physician; he believed himself poisoned. Beethoven's fatal illness was a dropsical one. Schubert was carried off by the same illness that robbed the world of Mozart, and in both cases it was probably brought on or aggravated by the privations of poverty. Schumann died of a brain disease, hereditary in his family; Chopin of lung trouble, and Wagner of a stroke of apoplexy.

It is singular to notice that many of the great composers died in the decade between thirty and forty. It seems as if the frenzy of composition, and possibly in some cases the rigors of poverty, brought about their fatal result almost always before the fortieth year was reached. Once this dangerous epoch passed, the chances of longevity in the composer's case seem very good. The following table may illustrate this: —

Mendelssohn died at thirty-eight, Mozart at thirty-five, Purcell at thirty-seven, Pergolesi at twenty-six (the youngest of all the famous composers), Bellini at thirty-three, Chopin at forty, Schubert at thirty-one. Of those who passed this dangerous epoch, one may cite Händel, who died at seventy-four, Bach at sixty-five, Haydn at seventy-seven, Palestrina at seventy, Spohr at seventy-five, Gluck at seventy-three, Cherubini at eighty-two, Rossini at seventy-eight, Meyerbeer at seventy, and Wagner at the same age. Verdi wrote glorious music after his eightieth year, and may yet furnish more.

From the foregoing data one may discern both a menace and a blessing to physical well-being in the art of music. Properly used, music is a noble medicine, a divine stimulant; and we can most truthfully apply to it the words of the Latin poet:

"Musica Laetitia Comes, Medicina Dolorem."

"Music, the companion of pleasure and the medicine of sorrow."

SONG WITHOUT WORDS. R. Poetzelberger.

THE
ORCHESTRAL
INSTRUMENTS

THE ORCHESTRAL INSTRUMENTS

By LOUIS C. ELSON

CHAPTER I.

THE EVOLUTION OF THE ORCHESTRA.

THE word "orchestra" is derived from the Greek ὀρχέομαι, signifying "I dance," since in ancient Greece singers and musicians combined their art with that of the dance. Not only Greece, but Egypt, Assyria, and other ancient nations possessed instrumental combinations which may be regarded as primitive orchestras, although these orchestras probably played unison music. In ancient Rome the orchestras ran largely to flute-playing, and at the beginning of the Christian era the flute was the chief instrument at the religious sacrifices in that city. In mediæval times trumpets and drums seem to have been the chief elements of bands of musicians.

With the rise of opera, about the year 1600 (the first opera was printed in that year), an orchestra of different instruments came into existence. The band of musicians which supported the instrumental part in the opera of "Eurydice," composed in 1600, consisted of a harpischord, a large guitar, a viol, a large lute, and three flutes; the orchestra to the earliest oratorio, published in the same year, consisted of a double lyre, a harpsichord, a large guitar, and two flutes. There was a peculiar instrumentation in these early works, each character being supported in his solos by some especial instrument.

It is to Bach and Händel, however, that we must turn for the earliest modern effects of orchestra. The difference between these two composers in their orchestration was marked: Händel made every possible experiment with the instruments of his day, while Bach rarely left the more conventional path; Händel frequently controlled large orchestras, Bach seldom had more than twenty musicians in his band; Händel used every dramatic effect possible, Bach was satisfied if he evolved a glorious counterpoint; yet in one point the orchestras of the two early composers were alike, — they possessed many varied instruments capable of depicting different emotions. The variety of tone-color attainable in the orchestra soon after the year 1700 is by no means to be despised; if a few of our modern instruments, such as the clarinet, concert-harp, cornet, and keyed brasses, were absent, their loss was more than made up by the presence of certain instruments which are not found in the orchestra of to-day; thus, for example, Bach possessed a small violin sounding a minor third higher than the present violin, which instrument must have been very effective in sustaining a melody in high register; both Bach and Händel possessed varieties of oboes which to-day are obsolete; they had the basset-horn, the lute, and varieties of trumpets which must have sounded more brilliant than the modern instrument; and Bach had a small violoncello (his own invention) — the "violoncello piccolo." Although these instruments would seem to involve a large score for the use of the conductor, such a score was never written. It was customary for both Bach and Händel to write out the separate parts for the instruments, but in the score to give the merest skeleton outline of what was to be done. This mode of writing was customary on account of the constant presence of the composer at the performance of his own work; since he himself knew thoroughly what was expected of the orchestra, and since it was not deemed possible for the work of conducting to be deputized to another, almost all the scores that have come to us from the time of Bach and Händel have been found in such a sketchy state that it has been necessary to revise them, and fill in many missing parts. We very seldom, therefore, hear a score by these old masters without modern interpolations and additions. The "Mes-

siah," for example, has been retouched by Mozart, by Adam Hiller, by Robert Franz, and others.

The old scores were not directed by a conductor with a *baton*, but by the composer, who was seated at the piano (clavicembalo) or organ. A very brief synopsis of the evolution of conducting may be given: In ancient Greece the conductor led his chorus and orchestra in their unison music by stamping out the rhythm with a leaden or iron shoe, which he wore for this purpose. In mediæval times the rapping out of the rhythm was done with a heavy staff, and we learn of Charlemagne thus directing the music services of his court. This peculiar style of conducting caused the death of at least one composer, Lully. This irascible musician was leading one of his compositions while suffering from gout. The rehearsal not pleasing him, he became more and more angry, and desiring to give especial emphasis to his pounding struck his staff with all possible power upon the floor. In one of these emphatic taps he landed upon his gouty foot; inflammation followed; he declined to submit to amputation, and the great Lully literally died of conducting.

THE TRIO. *G. Mader.*

In Italy it was customary for the conductor to lead while playing the violin. If all went well he played his violin melody; if anything went awry he began rapping upon his violin-stand with the back of his bow, beating out the rhythm so that not only the musician but all the audience heard it. Even the classical period in music, the time of Haydn, Mozart, and Beethoven, must have been very backward in the art of conducting. When we read of the deaf Beethoven attempting to lead his own composition (as, for example, the Ninth Symphony), we are astounded at the audacity of such an attempt. But as a matter of fact the orchestra paid more attention at this time to the chief violinist than to the composer-conductor. Conducting with a *baton* or stick was not established until this century, although some traces of it are found at earlier epochs; in England it was sneered at in the public prints as late as the year 1836.

With Mozart and Haydn the use of the skeleton score passes away, and we find these composers writing their orchestral works in so definite a manner that the presence of the composer was rendered entirely unnecessary at the performance. It is not our purpose to speak of individual conductors; but we may mention the fact that Mendelssohn in Germany and England, and Berlioz in France, seem to have been the first great conductors in a modern sense. Since that time a host of great orchestral leaders have arisen; and if we no longer possess the golden epoch of creation, we certainly live in the era of greatly advanced execution. Beethoven never dreamed of such perfection of performance as his symphonies receive in any great modern orchestral concert of to-day.

The orchestra may be regarded as a great palette which contains all the colors which the tonal painter desires to have glow forth in his work. The presentation of such effects may be found even in the earliest operatic scores; and the oratorios of Händel show some attempts on the part of this composer to achieve dramatic tone-coloring. Gluck, in the last century, also did pioneer work in this direction, and understood how to suggest this or that emotion by the tone-color of the instrument which was prominent in his accompaniment. Haydn, also, in his "Creation" and "Seasons," achieves a graphic style by means of the employment of special instruments for special effects.

But the first great advance in the comprehension

of the character of each orchestral instrument is to be sought in the works of Beethoven; it is not too much to entitle him the liberator of the orchestra. No instrument was too humble, no tone-color too unpromising, for him to use in his wonderful tone-pictures. In his First Symphony we find the kettle-drums put to a new and important use; in his Third Symphony the horns are given passages beyond what can be found in preceding works; in his Fourth and Fifth Symphonies the contrabasses are suddenly released from the bondage of playing tonic and dominant notes — the fundamentals of their chords — and give passages of absolute virtuosity; in the Eighth Symphony the bassoon becomes prominent with a new tone-color; in the Fifth and Ninth Symphonies the contra-bassoon enters in; in his Fifth and Sixth and Ninth Symphonies the trombones enter the symphonic orchestra for the first time; the list is endless.

With Beethoven, then, the modern orchestra is born; yet there have been great improvements in size, conducting, and virtuosity since his time. The technique of the orchestra is to-day far beyond that of the early part of the century. For example, when Beethoven, in his "Egmont" Overture, sent his violins to the four-lined C, the violinists exclaimed against the extreme difficulty of such high passages in orchestral works. To-day the modern composers use higher passages, and even in harmonics, without encountering any remonstrance from their musicians. Almost every artist expects difficulties in the modern orchestral score, which fifty years ago were only to be encountered in solo works.

In looking at an orchestral score the amateur will generally find three groups of instruments. At the top of the page, in a single group, he will find the wood-wind instruments in the following order: Flute, oboe, clarinet, bassoon, forming a quartet which can play its own four-part harmony; in the center of the page, underneath the wood-wind, will be found the brass orchestra, also a band in itself, consisting of trumpets, horns, sometimes trombones and bass tubas, and almost invariably kettle-drums. These instruments can also give an independent harmony. Below these, at the foot of the page, we find the most important part of the orchestra, — the strings. The string orchestra, in itself an extensive and independent band, is the most important part of the modern organization. Again, we find a four-part harmony; and the instruments are written in the following order: First violin, second violin, viola, and violoncello. The contrabass, grouped with these, is not only the bass of the strings, but also of the entire orchestra.

It will be seen, therefore, that while an ordinary score presents many different parts to the eye, its basis is generally four-part writing, and that the wood-wind presents soprano (flute), alto (oboe), tenor (clarinet), and bass (bassoon); the strings following suit with first violin (soprano), second violin (alto), viola (tenor), and violoncello (bass).

A large score would go much beyond the above schedule. It may be of interest to compare one of the largest modern scores with the simple scores cited above. Wagner's orchestration in "Die Walküre" calls for the following forces: Two piccolos, two flutes, three oboes, one English horn, three clarinets, one bass clarinet, three bassoons, eight horns, four trumpets, one bass trumpet, four trombones, and one to four tubas; two pair kettle-drums, one pair cymbals, one bass-drum, six harps, and a flute, besides the string band of violins, violas, etc.

Berlioz has left on record his views regarding the proportions of a full modern orchestra. The following is the list: Twenty-one first violins, twenty second violins, eighteen violas, twenty violoncellos, ten contrabasses, four harps, two piccolos, two flutes, two oboes, two clarinets, four bassoons, four horns, two trumpets, two cornets, four trombones, one bass tuba, two pair kettle-drums.

Without going to these extremes we may state the general size of a well-equipped modern orchestra as having from seventy to ninety men, which may at the same time contradict the vulgar error which supposes that the larger an orchestra the better the music. When Wagner presented his great trilogy in Bayreuth, in 1876, he had such a host of volunteer musicians that it would have been an easy matter to form an orchestra of from fifteen hundred to two thousand men. He never exceeded one hundred and sixteen.

German investigation into the subject of orchestral size has found that about one hundred men in a medium-sized hall, seating perhaps one thousand, gives the ideal result. It must be borne in mind that in swelling an orchestra to monster proportions, we gain in only one direction, that of volume of sound, but we lose in a much more important matter, — the unity of an orchestra, the precision

of attack, the careful unity of shading, which causes many instruments to work as one, the quick response to the conductor's suggestions; these are called the *ensemble* of an orchestra, and it is this ensemble which is ruined when the orchestra becomes of too great a size. It is mathematically incorrect, therefore, to imagine that ten times the size of an orchestra would produce ten times better music.

The placing of the modern orchestra in the concert-room is a matter of some importance. The men must be seated where they are easily under the conductor's control, where they can watch his every gesture, and where he can be sure that each signal can be seen by all. The instruments must be placed so that they will mutually support and not neutralize each other; and the forces must be arranged in such a manner that the heaviest and gruffest tones will be farthest from the auditor, and the sweetest and most delicate nearest to him. To have the contrabasses at the front in the symphony, for example, would destroy the effect of the more delicate tone of the violins.

Although conductors differ in some of the details of placing, the general position of the orchestra in the concert-room may be roughly stated as follows: Upon the conductor's left we find the first violins, back of these the violoncellos; at the conductor's right the second violins, and back of these the violas. The contrabasses, although belonging to the strings, are not generally grouped with them on account of their heavy tone, but are placed at the rear of the orchestra, so that their powerful fundamental notes come to the auditor through a wall of other harmonies.

As regards the placing of the wood-wind and brasses, conductors differ, some placing the wood-wind in a body at the back of the violoncellos on the left-hand side of the platform, and the brasses back of the violas at the right-hand side; other conductors place the wood-wind toward the center and the brasses back of these; the kettle-drums are generally at the extreme rear. If a harp is used its delicate tone requires it to be placed well in front. The same is, of course, true with any solo instrument; the piano, for example, in a piano concerto, would be in the center of the stage, the conductor generally standing back of it while leading.

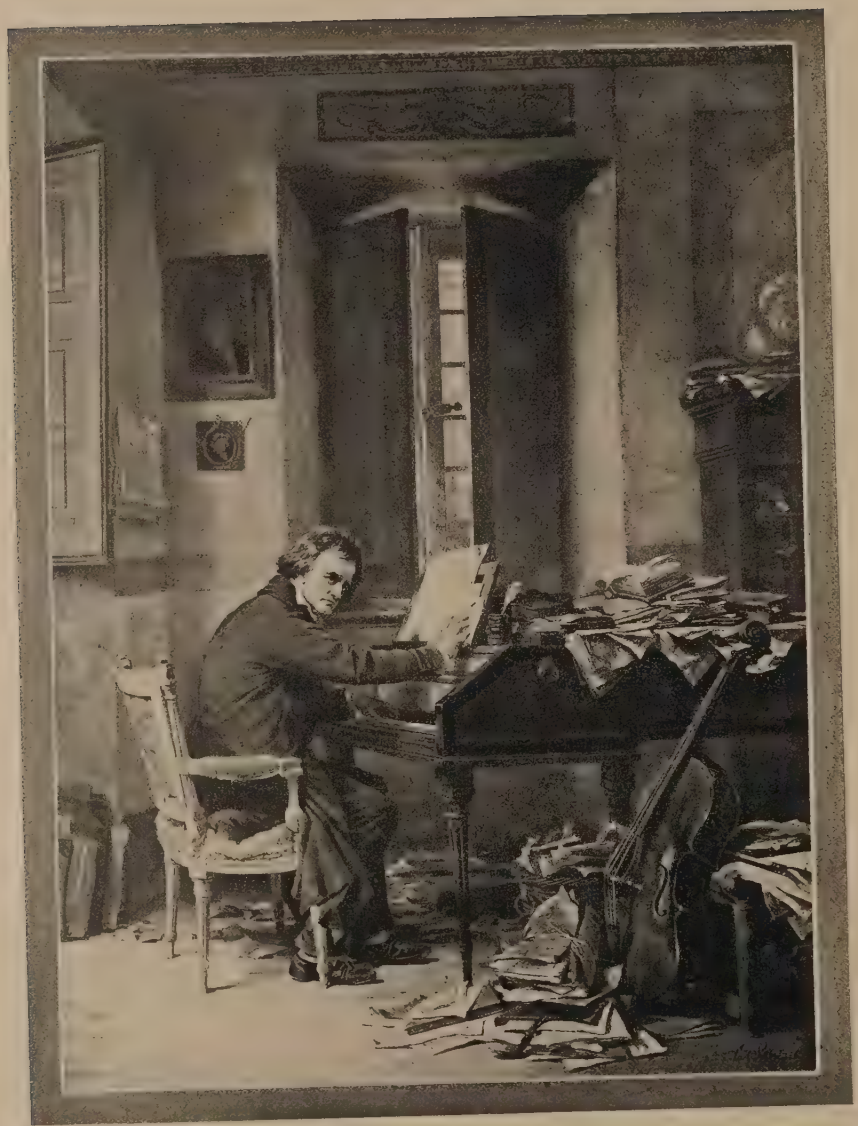
Several instruments not mentioned in the conservative schedule of the regular orchestra given above, appear so frequently in modern scores that they may almost be accounted regular members of the orchestra: the piccolo, the English horn, the brass clarinet, and even the contra-bassoon, may appear in the wood-wind; the harp may add an independent tone-color, and is not classed with any of the groups mentioned above; and trombones have become almost a permanent part of the modern orchestra, although sparingly used by the older composers and frequently absent from their scores.

It is a mistake to suppose that Wagner's scores present the largest combinations of instruments to be found in the domain of orchestration. Richard Strauss has gone beyond Wagner in the multitude of parts presented, and Berlioz has achieved the doubtful honor of calling for the largest regular orchestra ever demanded, in his "Requiem," in which work he not only calls for special forces of strings but demands four flutes, two oboes, four clarinets, eight bassoons, an English horn, twelve horns, four cornets, sixteen tenor-trombones, two base-tubas, two bombardons, four ophicleides, twelve trumpets, eight pairs of kettle-drums (with ten drummers), two bass-drums, three pair of cymbals and one gong!! A palliation of such an offense may be found in the fact that he is engaged in picturing the Day of Judgment, and utilizes all these noise-producing forces to symbolize the crack of doom.

Even with the limits thus extended, it cannot be said that the orchestra has reached its complete dimensions; changes are still made by this and that composer; a wooden trumpet was invented to give a special tone-color in one of Wagner's operas, Massenet has thoughts of bringing in a bass flute, Berlioz once employed a military clarinet, and composers are even now experimenting with a pedal clarinet, the deepest of all the wood-wind except the contra-bassoon.

Some composers are gradually leaving the grouping in four-part writing mentioned above, and are essaying especial effects by using groups of three instruments, of one family; thus the oboe, English horn and bassoon, form a group of three instruments of similar tone-quality, and the clarinet, basset-horn and bass-clarinet another.

Before leaving the subject of the orchestra as a whole, it may be well to speak of the duties of an orchestral conductor. The modern orchestra has as much of graded rank as a military organization; each part has its own special leader; there is a



BEETHOVEN IN HIS STUDY.

first flute, a first horn, a first viola, a first violoncello, etc.; the chief violinist, however, is a person of especial consequence in the modern orchestra, being the second in rank of the entire organization; he not only oversees the string orchestra but should be able to lead the entire organization should an emergency require it. In England he is called the "Leader" of the orchestra as distinct from the "Conductor," and sometimes the "Principal"; in Germany he receives the honorable title of "Concert-Meister," the master of the concert; in France he is called "Chef d'Attaque."

Over all these forces the conductor rules preeminent; it is not requisite that he should play any single instrument, but he must understand them all. Berlioz and Wagner were among the greatest of conductors, yet could perform on no musical instrument with any ability. The conductor must really be the poet of the orchestra; he must study the scores which are to be performed, must grasp their subtleties, must understand the exact balance of the different parts to bring out the best effect at each point of the composition; he must not be bound by mere metronome marks in any composition or in any part of it, but must give a free and elastic rendering of the thought as he conceives it; he must play upon his orchestra exactly as an organist controls his own especial instrument; his gestures must be graphic, and he must convey his intention to each of his men pantomimically at any instant during the performance, although the chief points are prepared at the rehearsals; he must signal to each instrument the moment of its entrance, particularly if its part has had a long rest; his beat must be decided, intelligible, and he must infuse something of confidence and calmness among his men in the midst of difficulties often very severe. The mere standing up and waving a baton before a set of musicians is the least important and most obvious sign of the conductor's duties.

The great advance in conducting has led to the establishing of great orchestras in the modern musical field. Among these one can mention the Meiningen Orchestra (now dissolved) which was brought to phenomenal excellence by one of the greatest of modern conductors, Von Bülow. The Gewandhaus Orchestra of Leipsic is another organization which deserves honorable mention. Paris possesses an excellent orchestra under Colonne, and the late M. Lamoureux also led a superb organization. The great Conservatoire of Paris has its own organization; Vienna possesses an orchestra of one hundred and twenty-five men, probably the largest permanent orchestra in existence. America, too, has excellent orchestras, in Chicago and in New York; but the greatest of all the American orchestras, and the equal of any in the world, is the well-equipped and splendidly directed Boston Symphony Orchestra.

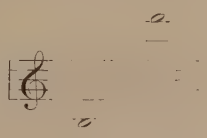
CHAPTER II.

THE VIOLIN.

This instrument seems to be one which was unknown to many nations of the ancient world. The proverb which glibly says—"Nero fiddled while Rome was burning"—is emphatically false, since Nero and the ancient Romans had no fiddles. The instrument came into Europe, probably from India, at about the time of Charlemagne, in the eighth century. Very popular, from the time of its first appearance, it underwent many changes of shape, until in the last half of the seventeenth century, and the first half of the eighteenth century, it reached its perfection, the one hundred years indicated being the golden period of violin making. It is not to our purpose to speak of the great violin makers, or even of the greatest performers of the instrument; but we may passingly mention that Stradivarius, who died in 1737, brought fourth the noblest instruments; Paganini, who died in 1840, was the most wonderful performer that the world has yet possessed upon this difficult instrument.

The violin has four strings which are tuned as follows:

and its usual orchestral compass is



Soloists can, however, give tones nearly an octave higher.

In Beethoven's day few orchestral scores demanded a higher note than $\overline{\overline{a}}$ in orchestral playing; in modern times this has been much exceeded; Wagner's prelude to "Lohengrin" presents

a celestial passage, picturing the "Holy Grail," in the highest register, using the harmonics upon four solo violins combined with three flutes. In the time of Beethoven it was not expected of the orchestral player to perform harmonics at all.

The violin can picture all emotions, and it is, therefore, the most important instrument in the orchestra; it can be developed in two directions, that of virtuosity and mere display work, and that of emotion and deep feeling. The orchestral violin music is generally supplied with bowing marks showing exactly which phrases are to be played with down-bow and which with up-bow, which accounts for the unanimity of motion generally seen in a well-trained orchestra. Some modern conductors have discarded these bowing marks, presuming that each artist should choose his own method of bowing, but a better ensemble, a more perfect unity, is generally secured by following said bowing marks.

The Violin.

The violin is a melodic rather than a harmonic instrument, yet in solo work it is comparatively easy to play two simultaneous melodies (double-stopping) upon it. Such execution is not required in the orchestra; for in orchestral work, when the composer desires two melodies in the violin part, he simply causes the violinists to divide their forces, and the passage would be marked "divisi." Slurs in violin music show what is to be played to a single bow stroke, and the legato is the most used and effective execution of the instrument.

A tremolo can be very effectively made upon the violin by moving the bow rapidly to and fro upon a single position with an easy action of the wrist; this tremolo is frequently used in orchestral work to picture mystery or agitation; in melodrama its well-known function is to accompany the death of the heroine, or the approach of disaster to the hero, and in this it becomes rather a tawdry effect. Various kinds of staccato can be produced upon the violin; the notes marked "detachée" or "martellato" interrupt the tone by a pause of the bow without removing it from the string. A peculiar, rippling, laughing staccato is produced by what is called "arco saltando," or "flying staccato," or "bounding bow"; it is produced by allowing the bow to skip upon the string, rebounding at each note by its own elasticity. Trills and embellishments, scales, and sudden skips, are permitted in all possible guises in violin work, yet they naturally appear more copiously in solo than in orchestral passages.

Sometimes the violin is picked, exactly as a guitar or mandolin, the use of the bow being discarded temporarily; such passages are called "pizzicato." In playing "pizzicato" the violinist plucks his string at a considerably greater distance from the bridge than he would bow; this is done for an acoustical reason. By a physical law (explained in the article on the "Philosophy of Music"), a vibrating substance divides itself into smaller vibrating segments, each of these segments emitting a higher and fainter tone than the one which is played; these tones blend with the fundamental tone and alter its quality; if they are strongly present the tone becomes thin, penetrating, and somewhat acidulous in character; a plucked string has more over-tones (as these higher tones are called) than one which is bowed or struck, and its tone, therefore, is rather unpleasant; the quality can, however, be pleasantly modified, and the excess of over-tones eliminated, by plucking toward the center of the string, this preventing some important segments from forming, and thereby destroying the over-tones which they would produce. By plucking, therefore, at some distance away from the bridge, the violinist obtains an agreeable tone in "pizzicato" passages; were he to pluck closer to the bridge the tone would at once become strident and irritating. The "pizzicato" is one of the most effective orchestral touches upon the violin, and it is frequently used to picture mystery or to accompany a melody, as if it were supported by a guitar, the latter instrument not appearing in the orchestra. When the "pizzicato" passage is ended, and the bow is to be used again, the words "coll 'arco" or simply "arco" would indicate its resumption.

An orchestral effect, somewhat like a "pizzicato," but less pronounced and clear, is sometimes used in orchestral work only (it is too light for

solo passages); this is the tapping of the string with the back or wooden part of the bow; it is called "coll legno," — "with the wood."

An appliance connected with the violin, both in solo and orchestral work, demands especial explanation; it is called the "mute" or "sordino." The "mute" is a clamp with three prongs which is placed upon the bridge in such a manner as to clasp it closely between the strings; the vibrations of the strings are carried by the bridge to the sounding-board or box of the violin, and the greater part of the tone of the instrument is caused by the vibration of this box; when, therefore, the bridge is clasped tightly by the "mute" the vibrations are restricted and checked from passing freely from the string to the body of the instrument, the result being a much softer tone, which has a greatly modified character. Muted passages are generally pathetic, gentle and tender in quality. Cradle-songs, slumber-songs, passages presenting tender simplicity or tearful grief, would generally be played with the "mute."

"Con sordini" signifies the employment of the "mute," and the composer must allow some measures of rest in the violin part for the players to place the "mute" upon their instruments; "senza sordini" would indicate the removal of the "mute" from the bridge; and again, some time must be allowed to accomplish this.

The "glissando" effect, by sliding from one tone to another, is far more freely employed in solo work than in orchestral playing; it is an effect that can be easily overdone.

The production of harmonics upon the violin is an effect that is very sparingly used in orchestral music, though quite common in brilliant solos; it is produced by an application of the acoustical law already alluded to, the division of the vibrating string into equal segments. If we press the string firmly against the finger-board we "stop" it, and by this "stopping" shorten its length and produce a higher tone than the open string; if, on the other hand, we touch a string lightly at some aliquot part, or equal division of its length, we cause it to subdivide its vibrations and produce one of the over-tones without the fundamental, (see "Philosophy of Music" for further statements of this principle); if we touch the string lightly, — the touch of a feather or the pressing of a tooth-pick would be sufficient, — at one-half its length, we cause the string to divide into two segments, each producing an octave of the full length of the string; if we touch in the same manner at one-third the length of the string, measuring either from bridge or not, we divide it into three tiny strings, each of which is giving a tone a twelfth higher than the full length of the string. The following table will show what tones the divisions of the G string bring forth:

Paganini, by the use of very thin strings, was able to reach the 12th harmonic.

The above are called "harmonics," and being produced by divisions of the full length of the string they are also described as "natural harmonics." It will readily be seen that by "stopping" we can shorten the length of each string; if we thus shorten the string and then subdivide its new length into equal parts, we produce a harmonic that bears a similar relation to the length of the "stopped" string that the above table does to the length of the open string. Such harmonics are difficult to produce, and ought to be applied very sparingly in orchestral scores; they are called "artificial harmonics." The quality of tone of all the harmonics is of a sweet, rather piping character; this quality is so pronounced that the German writers call them "flageolet-tones." Wagner has been quite bold in the application of harmonics, and the end of his prelude to "Lohengrin" exhibits a very effective passage of this kind of work.

The position of the bow upon the strings, in accordance with the law above alluded to in connection with "pizzicato," is of considerable importance; the nearer to the bridge the bow is placed, the more over-tones or harmonics will blend with the tone, and the brighter the quality will become; if the bow is placed directly against the bridge the result becomes a peculiar squeaking and thin tone which might sometimes be used for especial effects in both orchestral and solo work; this is called "sull' ponticello" or "upon the bridge."

We have given the regular tuning of the violin above, but it may be passingly stated that many soloists have achieved especial effects by different methods of tuning; and Barbella, Lolli, Tartini, Baillot, Winter and Paganini, each used an especial tuning for individual touches.

Although the violin can play in all keys, those tonalities will sound best in which the open strings are chiefly used; thus, C, G, D, A, E, and F major with their relative minor keys would sound better than any of the other keys. We may here again mention the fact that the "second violins" of an orchestra are similar instruments to the first violins but played in lower positions, taking the alto part of the string quartette.

CHAPTER III.

THE VIOLA, VIOLONCELLO, AND CONTRA-BASS.

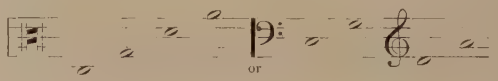
THE viola is an instrument similar to the violin but of larger size, with thicker strings and heavier tone. It receives many different names: the English call it the "tenor viol"; the French, the "viola alto," or simply "alto"; the Germans, the "bratsche."

The Viola.

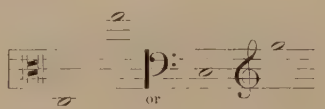
We have already stated that the violin can picture all emotions; this is not the case with the viola, which, because of its heavier tone and deeper register, suits to especial emotions. When an instrument is definitely applicable to certain emotions, we may speak of it as having an especial "tone-color"; and the study of the tone-coloring of an orchestral score is greatly assisted by a knowledge of the character of each instrument.

An orchestral score might differ from a piano work very much in the same manner that an oil painting differs from an etching; the etching might present beautiful drawing, grouping, contrast of style, etc.; the oil painting would present these things, and add to them the glow of color. In just such a manner the piano work may present a fine melody, rich harmony, and contrast of styles, but the orchestral work gives all these, and adds the effect of a special coloring to each emotion. The element of this tone-coloring has formed an especial study with composers ever since the time of Beethoven. If we were to examine a painting portraying Winter, we would expect white paint; if the subject was Spring, green would predominate; and in like manner if an orchestral work portrayed revelry we would listen for the piccolo; if the subject were grief, the oboe; if it were melancholy, the English horn or the viola.

The viola, in its middle and lower registers, pictures a dreamy sadness better than any of the string instruments, and it is frequently used for this effect in scores; *per contra*, its thick strings cause its high notes to sound rather dull and lifeless, and they are seldom employed by composers who have studied the nature of the instrument. The tuning of the four strings of the viola is as follows:



and its orchestral compass about



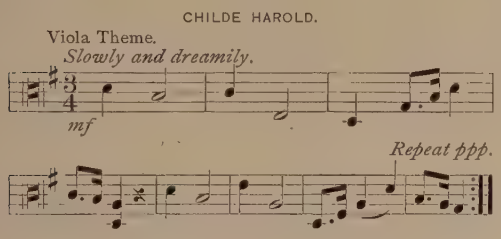
although four or five higher notes are possible.

All violin execution is possible upon the instrument, but as its strings are longer than those of the violin it requires rather a wider "stopping"; that is, the fingers of the player are held farther apart than in violin performance; yet every advanced violinist is expected to understand and play the viola. The viola is notated in the alto clef, since this gives its orchestral compass upon the staff without using too many ledger lines.

Although the viola fulfills a very important function in the orchestral score (few orchestras have, however, enough violas to produce the best effect), its solo répertoire is extremely limited, and it stands seemingly as a poor relation between the richly endowed violin and violoncello.

The most prominent use of the viola in orchestral music was made by Berlioz in his "Childe Harold" symphony, wherein the viola pictures Byron's melancholy hero, and is the personification of the brooding gloom which the poet has por-

trayed. This theme is so characteristic that we present it herewith.



In the slow movement of his "Italian Symphony" Mendelssohn made good use of the melancholy color of the instrument.

More than one attempt has been made to introduce another instrument into the family of strings which should stand between the viola and the violoncello; Bach invented a small violoncello which he called the "viola pomposa," or "violoncello piccolo," and even wrote music for this new instrument, but it has become obsolete. A little before 1880 a German musician, Herman Ritter, of Würzburg, invented a larger viola which he called the "viola alta," but which is more generally named after its inventor, the "Ritter viola." This is the largest instrument of the string family which is played upon the arm; it requires so long an arm and so large a hand that few can perform upon it, and in spite of its excellent tone-quality it has not yet made its way into the regular orchestra. In light orchestral scores we sometimes find the viola carrying the bass part. Rubinstein's sonata for viola and piano can be mentioned as one of the prominent works for this instrument.

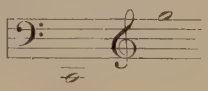
THE VIOLONCELLO.

The name itself contains in its etymology a bit of musical history. In olden days the contra-bass received the name of "violone;" when, therefore, a small contra-bass was invented, it received the appellation of "violoncello," meaning merely "The little violone." The mis-spelling which one sometimes sees of "violincello" is nonsensical, since the word thus spelled would mean "the little violin."

The violoncello can express every emotion as can the violin, but it stands in its relation to the latter as a baritone voice might to a fine soprano; it is masculine where the violin is feminine, and many composers have taken advantage of this fact to present musical dialogues between the violoncello and violin, as if a youth and maiden were conversing together. The beginning of the *allegretto* of Beethoven's Eighth Symphony affords an instance of such dialogue effect.

The violoncello has four strings tuned as follows —

and its orchestral compass is about



It is notated in the bass and tenor clefs, occasionally, for high notes, the G clef being used.

The Violoncello.

All violin execution, "pizzicato," "flying staccato," "harmonics," "mute," etc., can be applied upon the violoncello. The harmonics are less

secure and more difficult because of the increased thickness of the strings. The 'cello-player can sometimes use his thumb (which violinists never use) upon the highest string of his instrument.

In orchestral playing the violoncello is generally united with the contra-bass, playing an octave higher than the latter instrument. In lighter scores the violoncello would often unite with the viola in forming the bass, playing either in octave or in unison with that instrument. Although many rapid passages occur on the instrument, it should not be pushed to such rapidity as would be possible upon the violin, since its thick strings require more time to enter into vibration than the thinner violin strings. United to the contra-basses in the bass part of an orchestral score it adds purity and clearness to the bass part.

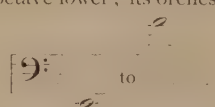
Its exquisite tone quality leads composers to write many *obbligato* passages for the instrument. Its "pizzicato" is an especially good orchestral effect, as is also its tremolo; but "harmonics" would very seldom be heard upon the violoncello in the orchestral score, although Verdi in his opera "Aida" has used both contra-bass and violoncello harmonics in the scene by the Nile, of the Third Act. The beginning of the overture to "William Tell" by Rossini affords a good example of violoncello *obbligato*, and was originally scored for five solo violoncellos, but is frequently given by one solo instrument supported by orchestra.

The two lowest strings of both viola and violoncello are wired to cause slower vibration; on the violin only the lowest string, the G string, is thus weighted.

CONTRA—BASSES.

The contra-bass has generally four strings as the string instruments already described, but three-stringed and five-stringed contra-basses also exist, the latter, however, being quite rare. Since the four-stringed contra-bass is the one generally employed in all orchestras we will speak chiefly of this instrument. The tuning of the four-stringed contra-bass is as follows:

sounding an octave lower; its orchestral compass is



also sounding an octave deeper.

It will be noticed that while the violin, the viola, and violoncello, tune in fifths, the contra-basses tune in fourths; the chief reason of this is the difficulty of stopping the very thick strings found upon this instrument. By tuning the strings a fourth apart, the open strings come into play more frequently in passages of medium

The Contra-bass.

depth than would otherwise be the case. The contra-bass sounds an octave deeper than written; the notation is given an octave higher than the actual sounds merely for the convenience of avoiding many ledger lines. The contra-bass is the deepest regular orchestral instrument; occasionally extra instruments, of greater depth, such as the bass-tuba, or contra-bassoon, or harp, appear in the orchestral score, but in the usual orchestra no instrument runs as deep as this foundation of the strings.

Once more we can summarily dismiss an instrument by stating that all violin execution is possible upon it, yet in the case of the contra-bass a few exceptions must be made: — Double stopping is almost impossible and is never used in orchestral playing; (it can only occur where one of the notes is given by an open string); the "mute," although existing, has so little effect that players rarely take the trouble to carry it with them; the harmonics, although possible, are very difficult upon such thick strings, and in spite of Verdi's use of them in "Aïda," are almost never heard in orchestral playing; on the other hand, the tremolo effects are of remarkable power, far more effective than those of any of the higher strings, and the "pizzicato" is one of the most impressive touches of the contra-bass, if executed on the open strings. Weber, in his overture to "Der Freischütz," uses a striking "pizzicato" effect upon the contra-bass, directly after the horn quartet of the introduction.

Special tunings of the contra-bass are frequent among members of the orchestra, and often different players will invent new points of tuning to assist them in this or that difficult passage. Changes of passages are also frequent in performances; often the player finding a passage too deep, or impracticable, will transpose it an octave higher, without warrant from conductor or composer; this has led to a greater freedom of treatment than is warrantable, in some orchestras, in the scores of the great masters. The contra-bass is not properly a solo instrument, although some skillful artists have astonished audiences by solos performed upon a small-sized instrument; such works may astonish (as when one sees the elephant in a circus executing a dance) but can scarcely charm. Dragonetti and Bottesini, the two greatest contra-bass players, were famous for their astounding solo work.

In the old scores we find the contra-bass chiefly employed to give the fundamental note of the orchestral harmonies; it moved along in the most deliberate fashion in tonic, dominant, and subdominant progressions; occasionally a bolder passage might be found, as in Bach's "Ye Lightnings, Ye Thunders" in the "Passion" music; but it was not until the time of Beethoven that the contra-bass came into its true heritage. It was the last named composer who gave to the contra-bass an independence far beyond what the old composers had deemed possible for the instrument. In the coda of the last movement of the Fourth Symphony, Beethoven gave to the contra-bass a passage as rapid and as intricate as a violin figure, — it is, in fact, an imitation of a figure previously presented upon the violins.

Weber sharply criticised this bold employment of the stately contra-basses, and in an article in a contemporary musical journal playfully pictured the contra-basses holding an indignation meeting against the composer who had abused them so. Such sarcasm by no means turned Beethoven from his artistic path (although he swore roundly upon reading the article), and we find him introducing another contra-bass passage of the utmost difficulty in the trio of the scherzo of his Fifth Symphony; but it is in his Ninth Symphony that we find the full grandeur of the instrument portrayed.

The tone color of the contra-bass is dignified and ponderous, and can easily be made bombastic; if it is used in bold skips and explosive tones, it can become very comical and grotesque. For such comical effects the reader can be referred to the last movement of Beethoven's Eighth Symphony, where the contra-bass is used in a very brusque and amusing manner. Even before Beethoven's time, Gluck had attempted a graphic effect upon the instrument in the opera of "Orpheus," where he causes the barking of the three-headed dog, Cerberus, to be imitated by sliding effects upon the contra-bass.

We have already alluded to the power of "pizzicato" upon the instrument. Berlioz applied this in full chords in his "Symphonie Fantastique," where he uses a four-part "pizzicato" harmony in the march to execution, producing a most sinister and depressing effect thereby. In the "Pastoral Symphony" Beethoven obtained a peculiar effect by mingling contra-bass and violoncellos together, in dissimilar groupings, which perfectly imitated the rumblings of thunder. In this passage the composer went below the written compass of the instrument. While many orchestras transpose these deeper passages an octave higher, the desire to preserve fidelity in such scores led a Leipsic musician, Mr. Karl Otho, to invent a contra-bass with five strings, through the aid of which all transpositions in contra-bass passages can be avoided. The grandest passages ever written for the instrument are found in the finale of Beethoven's Ninth Symphony. In these the contra-bass imitates the human voice and forms a transition to the introduction of voices

for the first time in symphony. The movement opens with a dissonant cry of rage and suffering, given by the orchestra, which is rebuked by the contra-basses in a most earnest recitative; again and again does the outburst of agony take place, always followed by the song-without-words of the contra-basses; finally the contra-basses sing a melody half-consoling, half-rejoicing, which is taken up by the bass voices of the chorus to Schiller's words, celebrating the era of universal brotherly love; at last we obtain the clue to the impressive dialogue of orchestra and contra-basses, — it is a promise of hope, of redemption, of final happiness, that the contra-basses have given instrumentally, and which is afterwards made definite by the words attached to the chorus part.

With the description of the contra-bass we have finished the strings of the orchestra; we need only mention that a species of large violin, called the Viol d'Amoré, has been used as recently as the time of Meyerbeer, who employed it as an obbligato instrument in the tenor solo of the first act of "The Huguenots." This instrument had seven strings above the finger-board, which were moved by the bow, and seven wires under the board which vibrated sympathetically, producing a very sweet and expressive tone. The part of the viol d'amore is now given to the viola, which has nearly the same compass, but not quite the same tone-color.

CHAPTER III.

THE HARP. OTHER PLUCKED INSTRUMENTS.

We now proceed to examine a group of instruments which, although producing their sound by vibrations of strings, are not counted with the "Strings" of the orchestra. Only one of the group is heard with any frequency in the modern orchestra, and this, the Harp, is written quite by itself in the score, and does not affiliate with any especial set of instruments; indeed it is more frequently combined with the horn or the wood-wind than with violins or stringed instruments.

THE HARP.

Fr., *harpe;* Ital., *arpa;* Ger., *harfe.*

The harp is one of the most ancient of musical instruments, probably beginning among savages with a simple bow with an added string, and attaining a wonderful development in ancient Egypt even before Scriptural times. This latter historical fact has a distinct bearing upon the modern use of the harp; the Hebrews, at the time of the exodus, copied the great harps of Egypt, some of these standing over six feet high, and possessing from 27 to 29 strings; when the Scriptures were written, the desire to ascribe to Heaven the best possible music led to the metaphor of the "Angelic harps," the harp being at that time certainly the best instrument of earth. The instruments of music

Old Diatonic Harp.

have since improved, but the metaphor remains unchanged, and the celestial concert is still spoken of as Harp-music by nearly all of the poets. As a consequence the composers, following the dictates of their librettists, have dropped into the habit of almost invariably using the harp to portray anything celestial. Schumann, in his "Faust," Berlioz, in his "Damnation de Faust," Gounod, Spohr, and a host of others, have marched in this conventional track; Wagner alone declines to allow

the harp to picture Heaven, but generally uses violins in high positions, sometimes in harmonics, combined with flutes, when he desires to represent celestial ecstasy.

Of course the harp would also properly come to the front, for the sake of historical accuracy, if the musical subject in hand dealt with the ancient Romans, Grecians, Hebrews or Egyptians, and also if the mediæval times were being depicted, for in all these epochs the harp was a leading instrument; as it became the national instrument of old Ireland and of Wales one may also expect to find it in any musical work connected with these countries.

Spite of its great antiquity the harp is comparatively a modern instrument in the orchestra. Up to 1758 it was a diatonic instrument, that could play but in a single key, and required some retuning before it could modulate into any neighboring key. Composers could not make use of so restricted an instrument, and, although we find Händel making a few efforts to employ its tone, in his operas, he seems to have been the only writer who used the instrument, in the orchestra, before it had been improved.

The improvements of the harp seem to have been begun in many countries, a Tyrolese adding little crooks of metal to change the pitch when chromatic intervals were desired, a Bavarian named Hochbrucker, in 1720, adding the first primitive pedals to the instrument, and two Frenchmen named Cousineau (father and son), attempting further devices to change the pitch of certain strings rapidly. But, according to Burney, it was M. Simon, of Brussels, who extended the harp to 33 strings, and first added a practical, single-action pedal, which could shorten each string and cause it to give forth a note a semi-tone higher than its original pitch. This at least made the harp semi-chromatic, and, if one could not readily play in all keys, one could employ a fair amount of modulation upon the instrument. Instantly we find a number of composers introducing the instrument into orchestral works: Gluck uses it in his "Orpheus," Mozart employs it in a flute and harp concerto written for the Duc de Guines, and Beethoven essays it in a number of his Ballet, — "Prometheus" — all of these calling for the so-called single-action harp, in which the pedals caused a wheel with two pins to turn and seize the string, shortening it very much as a violinist would shorten his string by "stopping"; this harp being an instrument that was still very restricted in its progressions. But in 1810, the Strassburger, Erhardt, driven from Paris by the Revolution some years before, and now living as Sebastian Erard in London, the head of a prosperous piano house, invented the full double-action concert harp, which could modulate into all keys by means of greatly improved pedals. The mechanism requires rather detailed explanation.

Double-action Pedal, Concert-Harp.

There are seven pedals upon the harp, each of which is intended to shorten the strings giving one note of the scale, the C pedal raising the pitch of the C strings, the D pedal of the D strings, etc. The string is tuned to a flat note in the first place; the scale running C flat, D flat, E flat, etc., — the harp thus standing in the unusual key of C flat, — seven flats. This scale is adopted to secure the uniform action of all the pedals, which can only shorten, not lengthen the string, therefore raising,

not lowering, each note. When any pedal is put half-way down (there is a little slot, or notch, in the instrument to hold it there if desired), the note which it works is changed from a flat note to a natural; thus for example, all the *D's* are flat, but if the D pedal be pressed halfway down they are all changed to naturals, since the pins of a wheel have gripped all these strings and shortened them. There are two wheels attached to each pedal. If now the pedal be pushed down as far as it will go (again a slot is prepared to hold it), the second wheel will act and grip the string further down, shortening it still more, and causing the note to become sharp. If we press our D pedal, which changed the D flat strings into D natural a moment ago, farther down, all the D's will become D sharp; and each pedal works in a similar mannner with each note of the diatonic scale. The pedals are in a semicircle at the base of the instrument, beginning with the D pedal at the left and running in the following order toward the right of the player — D, C, B — loud pedal — E, F, G, A.

The middle pedal, which we have called the "Loud Pedal," is of little value, and many players take it off the instrument altogether. At the foot of the strings the harp possesses a sounding-box, not vastly different from the sounding-box of the violin. It is a physical law that a sounding-board that is built as a box will not vibrate freely if it is closed; holes for the free vibration of the inner air are a necessity for such a box, and we find these sound-holes on the violin, guitar, mandoline, contra-bass, violoncello, etc.; even drums have such sound-holes to permit of free vibration; the banjo has none, since it possesses a flat sounding-board, not a sound-box. Upon the harp the sound-box is closed until the middle pedal is pressed down; this pedal opens a series of holes at the back of the sound-box, and the confined air being released vibrates more freely, thus giving a louder and longer-continued tone. It is, as above stated, generally deemed preferable to keep the sound-holes permanently open. The rods which lead from the pedals to the wheels which shorten the strings are concealed in the "pole" or front board of the harp.

Immediately after the great invention described above, the harp took its place as an orchestral instrument, although not present in the scores of some composers. Beethoven never employed the improved concert-harp, and Weber seems never to have attempted either the double or the single-action pedal harp.

The notation of the harp is precisely the same as that of the piano, two staves, one being bass the other treble, being used. The compass of the full-sized instrument is from the lowest C flat of the piano to the highest F sharp. The C and F strings of the harp are colored red and blue respectively, to guide the eye of the player in finding any special string quickly. The tone-color of the instrument is sweet and bell-like, but scarcely as celestial as its constant usage in this direction would seem to indicate.

We have already stated, in connection with the violin "Pizzicato," that a plucked string emits too many over-tones and its tone becomes thin and unpleasant in consequence, and that by exciting any string near its center one destroys important over-tones and "mellows" the tone somewhat. This is precisely what the harp player tries to do by plucking his strings near the center; if sometimes, for especial effects, he desires a shallow, twangy tone, he attains this by plucking nearer the upper end of his string.

Arpeggios are the most usual style of performance upon the instrument, the word "arpeggio" itself being derived from the "Arpa," or harp. Harmonics are very sweet and tender upon the harp. They are produced upon the same principle as the harmonics described in connection with the violin, but, upon the harp, only the first natural harmonic is used, and this is produced by dividing the open string into two equal segments, by pressing the string with the ball of the palm, just below the thumb. The harmonics sound best in middle register.

As the harp has no dampers, the cessation of the tone of the instrument must often be made by the hand of the player, who spreads it upon the strings. Longfellow, in his "Golden Legend," has poetically described this in his lines:

> "Time has laid his hand upon my heart
> Gently; not smiting it,
> But as the harper lays his open palm
> Upon his harp to deaden its vibrations."

A tremolo is very effective upon the harp, and the bell-like effects already spoken of can be made more striking by putting two strings in unison, a proceeding which can be easily done by raising any string a whole tone, thus making it of the same pitch as the next above.

In spite of the modulatory character of the pedals, one must be very cautious about sudden

changes of key upon the instrument, for the pedals require careful manipulation and a setting of three or four of them cannot be instantaneously done. Wagner has defied this law in "Die Walküre," in the final scene of which opera there is a sudden modulation which is the terror of all harp players.

Per contra, the six separate harp parts, in the last scene of "Das Rheingold," all interlacing in different arpeggios, as the gods cross the rainbow bridge that leads to Walhalla, form one of the most remarkable passages in the répertoire; it fairly glimmers and glistens through every measure.

Other especial effects may be briefly mentioned: Berlioz, in his "Childe Harold symphony," desired the tones of a heavy church bell, and a lighter one to sound the Angelus; it would have been impossible to bring the former upon the stage or to tune it exactly to the instruments; he therefore obtained its tone by uniting harp and horn for the deeper, harp and flute and clarinet for the higher bell; in Saint-Saëns's "Danse Macabre," midnight is also struck upon the harp, instead of employing a bell; in Cowen's "Welsh Symphony" the harp is introduced as a national instrument; Wagner often uses the harp for the sake of historic fidelity, in "Tannhäuser" and in "Die Meistersinger;" in the latter opera he causes the narrow-minded Beckmesser (said to have been drawn in caricature of the gentle F. Hiller) to be accompanied upon a steel-wired harp (the regular harp-strings are of catgut, by which is meant "sheep-gut," in the middle and upper registers), and this instrument may be said to resemble a harp dipped in vinegar. Berlioz in his "Damnation de Faust" calls for ten harps, — which he generally does not get.

Guitar.

It will be readily surmised that the harp sounds best in flat keys, since in these the strings are more generally allowed to remain at their normal length, without being set by pedals.

Mandolin.

THE GUITAR, ZITHER AND MANDOLIN.

These instruments are seldom found in the orchestra, yet there are instances of composers attempting their use in large works. Weber used a guitar in "Oberon" to accompany Reiza's song in the first act; Rossini caused Count Almaviva to accompany himself upon a guitar in his serenade in "The Barber of Seville;" and Schumann once attempted to bring the guitar into symphonic orchestra in his D minor symphony, where, in the Romanza, he caused the guitar to accompany a violoncello solo, but he soon became convinced that the tone of the instrument was too shallow and weak for this purpose and altered the accompaniment to violin pizzicato, which is also generally done with the other numbers cited above, when they are performed at present. The guitar sounds an octave deeper than written.

The *Zither* has occasionally been used, but in solo work only, in orchestral works which picture Swiss or Tyrolese scenes. The zither is the lineal descendant of the lute, which possessed open strings, like the harp, and fretted strings, like the guitar. As Bach and other old composers have left concerted works in which the lute appears, it would seem that these might be resuscitated, with the zither in place of the obsolete instrument.

The *Mandolin*, finely used in connection with

larger guitars and bandurrias, in Spanish music, has very rarely been found in the orchestra; Händel once employed it, but the most famous instance of the use of mandolin in opera remains the great serenade of "Don Giovanni," which Mozart scored for mandolin, but which is now almost invariably performed by a solo violin, pizzicato. The thin strings of the mandolin plucked by a "pick" or plectrum, cause it to give a tone heavily surcharged with over-tones and therefore thin and pungent; it may be passingly mentioned that if a string is plucked with a hard substance it will produce more high overtones than if set in motion by a softer material, therefore the guitar, plucked by the finger, has not so aggressive a tone as the mandolin, plucked by a bit of shell or ivory. The twangy tone of the mandolin is made somewhat mellower by the deep sound-box which is attached to the instrument.

Concert-Zither.

In concluding the stringed instruments it must be added that the piano has been used by Berlioz and by Saint-Saëns as a purely orchestral instrument, adding a new tone-color to the score.

CHAPTER V.

THE WOOD-WIND INSTRUMENTS — FLUTE AND PICCOLO, OBOE, ENGLISH HORN AND BASSOONS.

ALTHOUGH the wood-wind has been grouped as a quartet, of which the flute is soprano, the oboe alto, the clarinet tenor, and the bassoon bass, it can be more intelligently classified according to instruments which belong to the same family: there are three families of instruments contained in the wood-wind of an orchestra; first, those which have plain tubes with open mouth-pieces, like the flute or piccolo; second, those which have single-reed mouth-pieces, as the clarinets; third, those which have double-reed mouth-pieces, as the oboe, bassoon, English horn and contra-bass; and composers are beginning to use these groups independently of each other far more than was the case in the older scoring.

THE FLUTE.

It., *Flauto;* Fr., *Flûte;* Germ., *Flöte.*

The flute is the oldest instrument, so far as is known, at present existing; while we trace the harp to the beginning of ancient history, we find traces of the flute, ages before this, in prehistoric times. Flutes, or rough instruments resembling them, have been discovered among the ruins of paleolithic times, and the men of the old stone age evidently enjoyed the music of this instrument judging by the reindeer's horn with its mouth-piece and finger-holes, which they have left behind them.

In ancient historical times, also, the flute played a most important part; in Egypt the father of Cleopatra was a passionate flute player; in Greece Alcibiades and Lamia led the fashionable world, both male and female, into flute playing, and conservatories were established for the study of this instrument; in ancient Rome the flute was the instrument of religion, and no sacrifice or religious ceremony was complete without the assistance of players; Mendelssohn in his oratorio, "St. Paul," in the Heathen chorus, "O be gracious, ye immortals," has brought a touch of realism into music by causing the flute to play an important part here, as it might have done in ancient Rome.

Three centuries ago two kinds of flutes were used, the one played obliquely, as at present, and called the "traverse" flute, or sometimes the "German flute;" the other played direct from the lips, like the flageolet, and called the "beak-flute" (from its beak mouth-piece), or more frequently the "recorders." The allusion to the "recorders" by Hamlet may recall to each reader's mind the fact that the straight flute was popular in England in Shakespeare's day, but this flute has wholly disappeared from the modern orchestra. The flute of the classical epoch, (the time of Mozart, Haydn, Beethoven, etc.,) was rather a simple instrument, sounding best in the key of "D," whence it was called the "D flute," playing easily in some of the sharp keys but becoming much more difficult in keys of many flats.

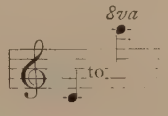
Its tone-color was pensive and gentle in the lower register, brilliant and piping in the upper.

It is singular to note that Mozart cared little for this instrument and used it as slightly as possible; even in his opera the "Magic Flute" one finds the minimum of flute music.

In 1832 the flute underwent a remarkable change, somewhat akin to that of the harp in 1810. The instrument before this epoch not only found difficulty in free modulation but some of its tones were slightly out of tune. The tones were produced by stopping or opening certain holes with the fingers, but as the position of these holes was limited by the exigencies of the human hand they were not always placed at the point where they would produce true intonation. In 1832 a German flute virtuoso, named Boehm, applied a new system of keying to the instrument; by means of levers and rods he caused the fingers to open or close holes which were placed at exactly the point demanded by true intonation; this not only brought the scale into its proper pitch but enabled the player to modulate with absolute freedom into all keys. After this improvement the flute was used by orchestral composers with a boldness of progression that was unknown in its earlier days.

SONG WITHOUT WORDS. *Wm. Thorne.*

The tuning of the flute, and of all wind instruments, is an application of a simple physical law,—*the longer the tube the deeper the tone;* therefore, all wind instruments are made slightly higher than the true pitch, and are given their proper intonation by drawing out the mouthpiece or otherwise elongating the tube.

The tone-color of the flute became somewhat brighter by the application of the Boehm system; and this was remedied by making the tube, which had been conical before, cylindrical, since the conical tube (which presents all the harmonics or over-tones) will always sound brighter than a cylindrical tube in which half of them are neutralized. The compass of the flute in orchestral work is

Its tone-color still remains as that of the old flute described above, and it is not only used as the soprano of a wood-wind quartet, but frequently employed for embellishments and variations which

may be added to a theme given by some other instrument.

It must not be supposed that the invention of the Boehm flute utterly abolished the old flute; the more primitive instrument still exists and is frequently heard in amateur performances, but the professional in the concert-room generally demands the developed instrument already described.

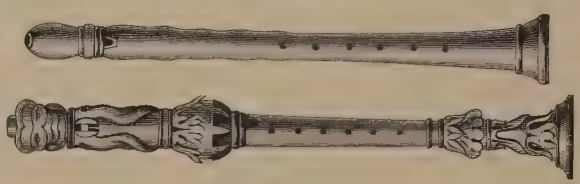
The notation of the flute is in the G clef. It is frequently employed as a foil to a brilliant soprano voice, and duets for the voice and flute are by no means a rarity in Italian operas.

Two flutes are deemed sufficient for the ordinary score, and one of these is sometimes interchanged for the piccolo, yet Wagner generally used three flutes in his scores, as did Verdi in "Aïda." Scales both diatonic and chromatic, arpeggio passages, skips in widest intervals, trills and light staccatos can be brought out upon the instrument. By a rapid movement of the tongue the tone can be broken to produce the effect of a tremolo. The material of the flute is generally of some rare wood (grenadilla wood is often used) or of silver or other metal. Brilliant passages for the flute may be found in the overture to "William Tell," the song of Alice in "Robert," the introduction to the Second Act in Meyerbeer's "Huguenots," Schumann's B flat Symphony, etc. The flute is a non-transposing instrument, that is, its tones sound exactly as written, yet there are flutes, rarely used, which sound higher than their written score. The tierce flute used by Gade in the "Crusaders" for example, sounds a minor third higher than written. Mendelssohn showed particular affection for the instrument, and, in addition to the historical use spoken of above, made the flute very prominent in his "Reformation Symphony." Among composers for the old flute one can mention Quantz and Kuhlau.

Keyed Flute, Schwedler System.

Wooden Flute, Conical bore Boehm System.

Silver Boehm Flute.



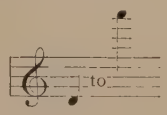
Old, Straight Flutes.

Piccolo.

THE PICCOLO.

Germ., *Oktavflöte;* Fr., *Petite Flûte;* It., *Flauto Piccolo.*

The word "piccolo" means "little;" the full name, therefore, of the piccolo is, in Italian, "flauto piccolo." It is sometimes called the "octave flute" from the fact that its tones sound an octave higher than written. It is about half the size of the ordinary flute, but in other respects entirely resembles it. Its tone-color is of a wild, feverish brilliancy. It is used to picture Bacchanalian revelry, being almost always present in drinking songs, and no picture of the infernal regions given by an orchestra would be complete without its spicy tones. It may well be called "the imp of the orchestra," and if, as we have seen, the harp represents celestial ecstasy and heaven, the piccolo is often used for exactly the opposite effect and place. In many orchestras when a piccolo is required the second flute player lays aside his instrument and performs upon this higher flute, but in large scores a separate piccolo player is required. Like the flute the old piccolo played easiest in sharp keys, and also, like the larger instrument, it was improved by the addition of the

Boehm system of keying. Special instances of its use may be cited; — Beethoven in the coda of the "Egmont" overture uses the piccolo in the final cadence to picture shrieks of triumph; Weber in "Der Freischütz" accompanies Kasper's drinking song with two piccolos; Meyerbeer in the "Infernal Waltz" in "Robert" gives impish prominence to the piccolo; the shrieks of the wounded are pictured by piccolo in Marcel's song "Piff-paff" in the first act of the "Huguenots." Although the piccolo is generally used in rapid and snappy phrases, Beethoven achieved a wonderful effect by using the instrument in slowly rising notes, in the midst of the storm of his "Pastoral Symphony," picturing the wind whistling fiercely as the tempest rose. The compass of the piccolo is written

but sounding an octave higher. The lower tones are almost useless in loud passages, while the highest tones, on the contrary, are most effective in *fortissimo* but scarcely usable in anything gentler.

CONCERT AT THE COURT OF FREDERICK THE GREAT. *A. Menzel*

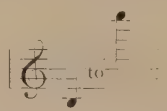
THE OBOE.

Germ., *Hoboe* or *Oboe;* It., *Oboe;* Fr., *Hautbois.*

The name of this instrument is derived from the French words "Haut bois," or "high wood," and it is probably an instrument of considerable antiquity. Many of the ancient instruments called "flutes" ("Tibia" or "Aulia") were probably of the oboe character. The tone-color of the oboe is remarkably thin, penetrating, and nasal; it contains more over-tones than any orchestral instrument, and its strong individuality makes it desirable to use the instrument sparingly in orchestral scoring, exactly as a painter would be sparing with scarlet although he might achieve some striking effects by its moderate use.

The oboe lends itself to different emotions; it can picture direct pathos, weeping, or poignant grief; on the other hand, its kinship to the tone of the bagpipe causes it to be effective in picturing rustic merriment; it is also freely used to picture a *naïve* simplicity. It is most used in rustic effects,

and may aptly be called the "countryman of the orchestra." Its orchestral compass is



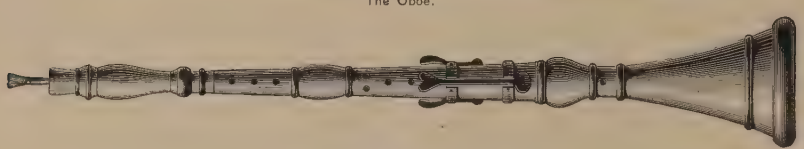
although some oboes extend a semitone deeper.

Its tone quality (as that of almost all wood-wind instruments) differs considerably according to the register used. It is rather hoarse and gruff in the lower octave, smooth and effective in the middle register, irritating and strident in its upper notes.

Long passages must not be written for the instrument, not because it requires too much breath, but because it demands too little. The oboe player has scarcely ever a chance to empty his lungs during his performance, he must breathe out the column of air so slowly and deliberately. Schumann, in his three romances (Op. 94) for oboe, has been merciless in this respect.

The oboe was a great favorite with the composers of the last century, and Händel and Bach seem never to have obtained their fill of oboe passages. Examples of the emotions mentioned above as portrayed by the oboe may be found as follows: The funeral march of the "Heroic Symphony" pictures direct grief and feminine sorrow, upon the oboe; the scherzo of the "Pastoral Symphony" gives a good specimen of its rustic bagpipe character; the scene entitled "In the Fields," in Berlioz's "Symphonie Fantastique," pictures the simplicity of a shepherdess, upon the instrument. Beethoven uses the oboe prominently

The Oboe.



Old Oboe da Caccia.

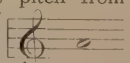
Old Oboe d'Amore.

for pathos in the prison scene in the second act of "Fidelio." There is also a great solo for the instrument in the "Benedictus" of Mozart's Twelfth Mass, — if Mozart wrote this work, which has been doubted.

French composers are especially fond of the instrument, and some of the best performers on the oboe are to be found in Paris.

The oboe is a double-reed instrument, its mouth-piece consisting of two thin slips of cane tied together in a manner to leave a narrow passage between them for the air to enter into the tube. The edges of these reeds are held between the lips of the player, who playing through them sets the column of air in vibration before it enters the tube of the instrument. Although the oboe is capable of quite rapid execution, few composers use it in this manner. It plays easiest in C-major and keys closely related to this tonality.

We have already stated that larger and deeper oboes than those at present existing were used by Bach and Händel in their scores. Passages written for these are generally given to the modern oboe or to the English horn.

The orchestra generally takes its pitch from the oboe, which sounds one-lined A  for the other instruments to tune by. The reason that the oboe is used for this office is that altering its pitch (drawing out its mouth-piece) spoils the quality of its tone, and puts it somewhat out of tune; this being the case, the instrument is allowed to play without retuning, the other instruments conforming to its pitch. The clarinet also suffers by retuning, but this instrument came into the orchestra long after the oboe had established its right to giving the pitch.

Händel wrote six concertos for the oboe, which

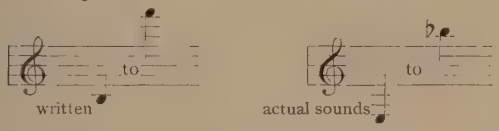
THE BROTHERS SOLO. *A. Humborg.*

are still favorite works with artists upon the instrument, and are more practical for the player than the three Romanzas for Oboe and Piano (Op. 94) by Schumann.

THE ENGLISH HORN.

Germ., *Das Englische Horn;* Fr., *Cor Anglais:* It., *Corno Inglese.*

This must not be considered a horn at all, but a larger sized oboe. It was derived from a large wooden pipe played by the shepherds in old England, from which came both the name of their dance, the "hornpipe," and the instrument. Like the oboe it is a double-reed instrument, although its reeds are larger than those of the pastoral instrument. Its tone-color is brooding and sad, and like the viola, it can picture a tender melancholy. Its compass is



It is a transposing instrument, sounding a fifth lower than written. Thus far the transposing instruments which we have met, the contra-bass, guitar, and piccolo, have been written an octave higher or lower than their true sounds to avoid using many ledger-lines. We now come to an instrument which transposes to a different note from that written, and for a totally different reason. The object of transposing instruments in this class is to preserve a *uniform fingering* upon different instruments upon which the same musician may be called to play. The oboe player, for example, will find the English horn much less difficult, because the fingering will resemble that of the instrument he is accustomed to. The clarinet player, changing from one clarinet to another, finds the same fingering presented him on each. To present the case colloquially, one might imagine a pianist who could play brilliantly in the key of C, but not in other keys. Let us further imagine our limited performer called upon to play a difficult work in the key of B flat; one might obviate the increased difficulties in our artist's path by sending for a tuner who should retune the piano one tone deeper than its normal pitch. As a consequence the pianist might now perform in his easy key of C, while the piano would give forth the tones of the key of B flat!

The English horn sounds best in deep and middle register, and might be likened to a masculine oboe. This effect has been admirably caught up by Berlioz, who, in his "Symphonie Fantastique," has introduced a dialogue between a shepherd and shepherdess, the shepherd being the English horn, the shepherdess the oboe. Cowen's "Scandinavian Symphony" uses the English horn prominently to picture melancholy. Beethoven seems scarcely to have understood the instrument, and has avoided its use save in his Op. 87, a trio

for English horn and two oboes, and it may be doubted whether even in this he thought of the English horn and not of the old-fashioned large oboes. We find no English horn passages in the works of Mozart or Weber.

In addition to Berlioz's effective use of the instrument in the symphony cited above, we may mention a beautiful instance of the melancholy character of the English horn, which may be found in the obbligato to Marguerite's song, "My Heart is Heavy," in his "Damnation of Faust."

The English horn is also used for a totally different effect from any described above. It is the perfect representation of an Alpine horn, or a shepherd's pipe, and wherever these effects are required we find composers using the instrument with some prominence. An instance may be cited in Wagner's "Tannhäuser," in the scene of the Minnesinger's return to earth, in the first act, where the shepherd boy gives a long solo on the English horn. Still more prominent is the English horn accompaniment to the scene upon the Alps, in Schumann's "Manfred"; as this is also a good example of "*Melodrame*," the combination of instrumental music with the spoken voice, from which the English have recently evolved a new art (?) which they call "Cantillation," we present the passage entire on page 121.

The overture to "William Tell" affords another prominent instance of an English horn solo, picturing the Alpine horn in similar manner.

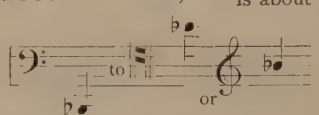
The earliest composers to use the English horn in their scores seem to have been Haydn, Mozart, and Gluck, yet none of these appear to have discovered the true tone-color, the brooding character of the instrument. Passing the time of Beethoven, Schubert, Weber, and Mendelssohn, who did not use it in their scores, we find the first composer who fully understands its effect to be Meyerbeer, who used it prominently, frequently, and effectively. Halévy was also a pioneer in this field. The moderns make the freest possible use of the instrument. Among recent works we can cite the largo of Dvorák's "New World Symphony" as presenting an excellent example of the melancholy side of the instrument.

Bassoon or Fagotto. Old Bassoons. Sixteenth and Seventeenth Century.

THE BASSOON.

Germ., *Fagott*; Fr., *Basson*; It., *Fagotto*.

This instrument probably had its origin in the Orient, and is possibly derived from the old Arabian instrument called the "Besuin." It belongs to the oboe and English horn family, but is much larger than either; and although it is a double-reed instrument, the peculiar shape of its tube causes some change in its tone-color; it can be made extremely grave and earnest; it can also become very grotesque and comical. It is so often used in the latter manner that it may well be called the "Clown of the Orchestra." It is a non-transposing instrument, and its orchestral compass is about

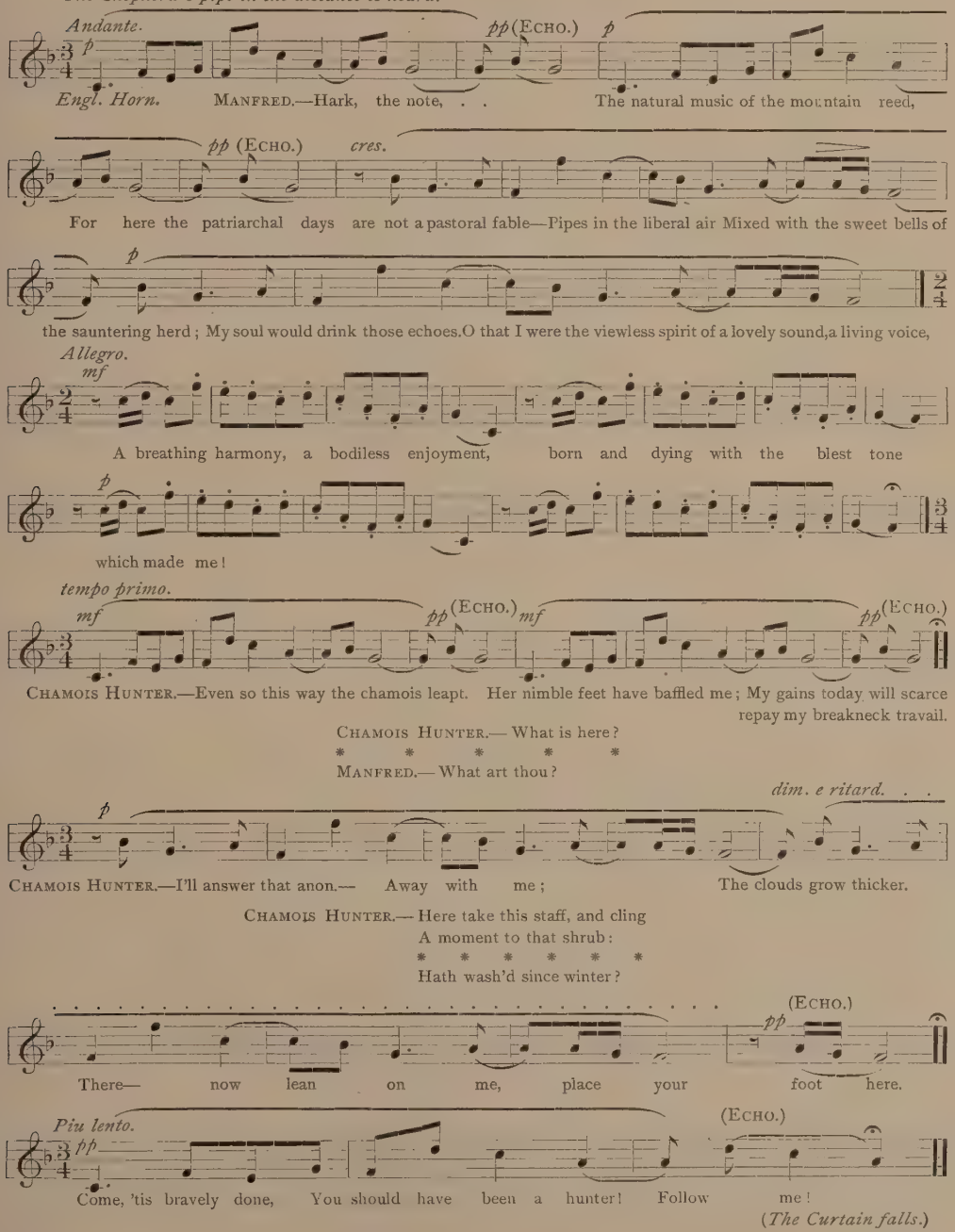


It is notated in the bass clef for low passages, the tenor clef for high ones.

Again, we find a marked difference in the registers and their characteristics on a wood-wind instrument. The deep register is somber and dirge-like, and forms an excellent bass for the wood-wind quartet; the middle register is dull and lifeless,

RANZ DES VACHES.

THE SWISS CATTLE CALL.

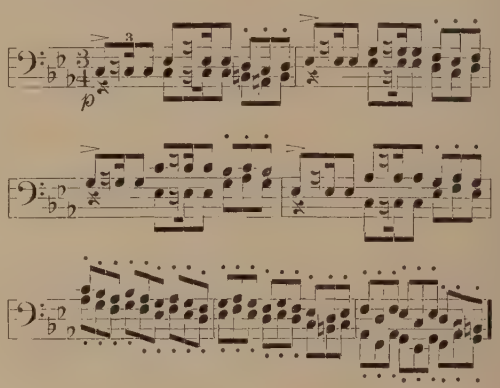
The Shepherd's pipe in the distance is heard.

while the upper notes can picture a cry of agony, or excellently portray distress or pain. The bassoon was much used by the old composers; the scores of Bach and Händel teem with prominent bassoon passages. The foreboding character of the instrument was thoroughly known to Händel, as witness his use of the bassoon in the oratorio of "Saul" at the raising of the ghost of Samuel by the Witch of Endor, or in the support of the bass voice in the spectral picture of "Behold a Ghastly Band," in "Alexander's Feast," in which the bassoons give a weird three-part harmony. One of the most remarkable passages for the instrument, a dreadful duet for bassoons, is found in the "March to Execution" of Berlioz's "Symphonie Fantastique," in which the muttering progressions, restless and unceasing, picture the footsteps of the crowd as they accompany the tumbril to the guillotine. Here, if anywhere in the répertoire, one finds a musical interpretation of Dickens's picture of the sinister mob of Paris, as portrayed in his "Tale of Two Cities":—

"Headlong, mad and dangerous footsteps to force their way into anybody's life; footsteps not easily made clean again if once stained red; the footsteps raging in Saint Antoine afar off."

That Berlioz held the instrument in high esteem may be shown by his calling for seven bassoons in his "Damnation of Faust."

No composer was fonder of the humorous side of the bassoon than Beethoven; when he was in a playful mood we find him turning to this instrument in the most sportive manner. The Eighth Symphony, which might well be called the "humorous symphony" of the nine, is brimful of bassoon passages; and probably no composer ever attempted a bolder and more grotesque touch in classical music than did Beethoven in the scherzo of the "Pastoral Symphony," where we find a bassoonist with a broken instrument capable of playing but three notes, performing the most comical and intermittent accompaniment to a dance that could possibly be conceived, a mere reiteration of the notes F, C, F, and the musician is too drunk to play even these notes in exact time and place.

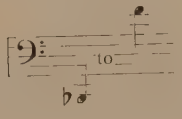
Mendelssohn is very nearly at the head of all the playful composers, and it is, therefore, but natural to find him making strong use of the bassoon. In his "Midsummer Night's Dream" overture, when the enchanted weaver Bottom is turned into an ass, the bassoon bursts out in wild and emphatic braying.

The name "fagotto," which is often applied to the bassoon, has its palpable derivation from the shape of the instrument (see accompanying cut,) which is like a bundle of faggots; and it is this shape which is responsible for the dullness of the middle register. This lifeless character had its most marvelous employment in Meyerbeer's opera of "Robert," in the scene of the "Rising of the Nuns" from their graves. In this part of the opera the composer desired to picture a dull and lifeless response to the incantation of Bertram; and scarcely anything in the whole bassoon répertoire is more impressive than the following passage for two bassoons:—

Scarcely anything can be imagined which more thoroughly conveys the presentiment of coming evil than the bloodless, unearthly sound of this short duet. Meyerbeer deserved all the abuse he received (and he got plenty of this, all the way from Schumann to Wagner) for his vicious system of "playing to the galleries," of seeking only for immediate applause; but occasionally one finds the spark of Genius in his orchestration.

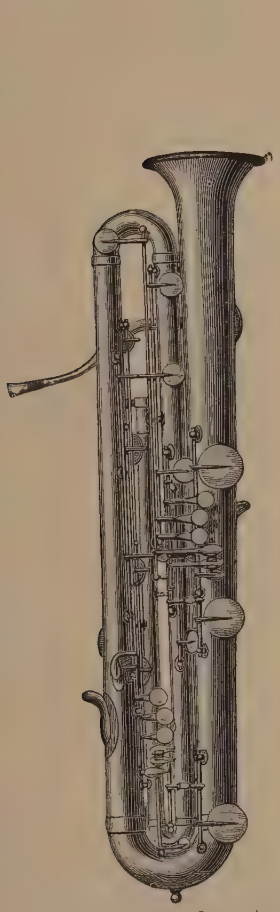
THE CONTRA-BASSOON.

This is a bassoon of double the ordinary size, having two broad reeds like the bassoon, but even wider, and possessing a grave, deep, and powerful tone, from which the humor of the bassoon is entirely absent. There are few players of this ponderous instrument, which requires a large amount of lung power, and readily varies from true intonation. We therefore find many substitutes made for the contra-bassoon. When a large score is attempted by a medium-sized orchestra the contra-bass and the bass-tuba often take its

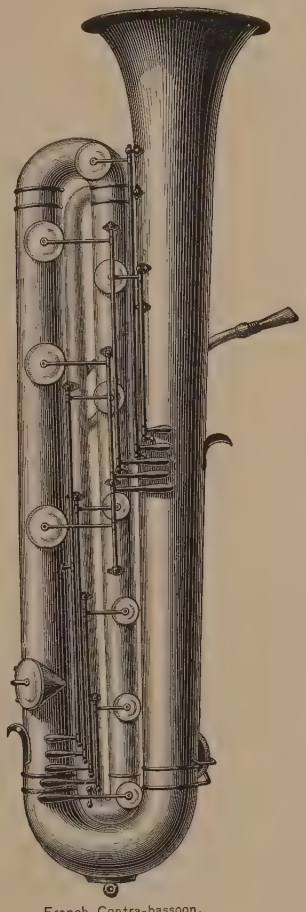
place. In France the Sarussophone, a brass instrument with double-reed, frequently becomes its substitute. The contra-bassoon is a somber instrument with a tone like a great organ-pipe, and was used even by the old composers most effectively; more than one instance of its employment may be cited from the works of Händel. Haydn, in his "Creation," at the words "By Heavy Beasts the Ground is Trod," pictures the step of the mighty elephant by means of the contra-bassoon. Beethoven introduced the instrument to the Symphonic Orchestra in the finale of the Fifth and Ninth Symphonies, but in both of these he used it chiefly to support and increase the power of the contra-basses; it receives much more characteristic employment in the grave-digging scene of his "Fidelio." The contra-bassoon is the deepest of all orchestral instruments; its orchestral compass is notated



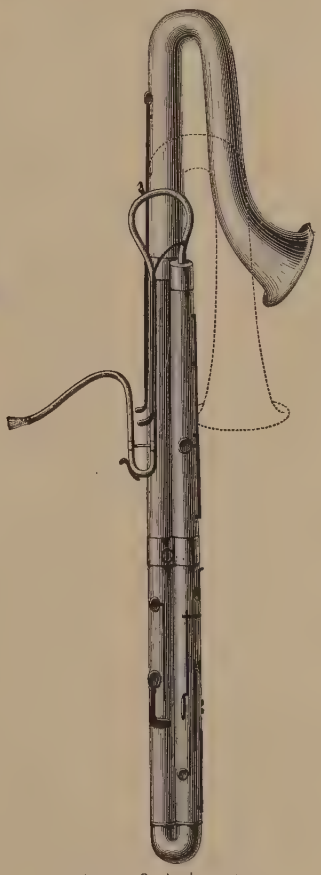
but it sounds an octave deeper than written.



The Contra-bass Sarussophone,
Which often replaces the Contra-bassoon in France.



French Contra-bassoon,



German Contra-bassoon.
Two kinds of bell are shown.

It may be mentioned that a small bassoon higher than the regular bassoon is occasionally found in French scores. This is called the "Basson quinte." The extensive compass of the bassoon exceeds every other wind instrument except the clarinet. This accounts for its varied employment, which is more diverse than any other instrument of the wood-wind family.

CHAPTER VI.

THE CLARINET.

Fr., *Clarinette ;* Germ., *Klarinette ;* It., *Clarinetto.*

THE clarinet is comparatively a modern instrument in its orchestral use; in a crude state it existed in the last part of the 17th century, having been invented about 1690 by Johann Cristoph Denner, of Nuremberg, but it was probably a much more ancient instrument, and it is not impossible that the ancients classed instruments which were similar to clarinets under the general title of *Aulia.* The clarinet was much improved

A Clarinet. B flat Clarinet. C Clarinet.

by a Viennese musician named Stadler. The name "clarinet" is derived from the trumpet, called *clarino* in Italian, since its tone in the upper register was thought in some degree to resemble the metal instrument. In England in the eighteenth century, it received the scriptural name of "shawm." In its early stages it was a crude and primitive instrument, incapable of much modulation and not admitted to the orchestra; Händel indeed used it once in his opera "Richard I.," but apparently gave it up as an impracticable instrument; Bach did not use it at all; therefore when clarinet parts are found in the scores of Bach and Händel, they have been added by a later hand. In the "Messiah," for example, in the Aria, "The People that Walked in Darkness," there are beautiful clarinet passages, but these were added by Mozart.

Old Clarinets of Händel's Time.

A reference to the pictures given, of the clarinet as it existed in the days of the older masters, will at once impress the reader with the original crudity of the instrument.

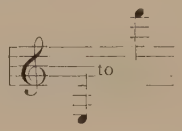
Mozart seems to have been fond of the instrument and was the first to introduce it into the Symphonic orchestra; in 1788 he wrote his three last symphonies, and in one of these (the E flat Symphony) he uses the clarinet in place of the oboe; and we find it in some other of his works.

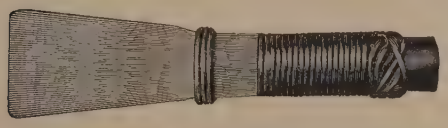
Haydn used the instrument, but sparingly; with Beethoven we find a full use of the new instrument, but even this great master of the orchestra did not seem to understand its subtleties and different tone-colors; he uses it, for example, in his "Pastoral Symphony," second movement, to picture the call of the yellow-hammer, and in the same work for the shepherd's call after the thunderstorm; but it is with Weber and Mendelssohn that we find the first full appreciation of the instrument.

The deepest register of the clarinet is called the

"chalumeau,"[1] and has a peculiar spectral and ghost-like character; nothing could picture foreboding better than this register. We find Mendelssohn employing this effect in the first part of his "Scotch Symphony," picturing the lonely and gloomy character of the Scottish Highlands, and again in his oratorio of "Elijah" picturing the gloom of Israel after the curse of the prophet; a little before this we find Weber bringing out the full effects of the dark character of lower register of the instrument in his overture to "Der Freischütz" and using its ghostlike quality in the incantation scene of the same opera. The works of these two composers are full of glorious clarinet passages, and they may be called the true discoverers of the capabilities of this instrument.

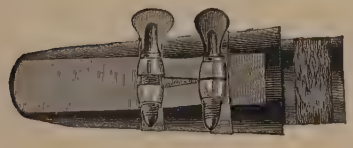
The middle register of the clarinet is smooth and pleasant, and resembles the human voice as closely as any orchestral instrument. The highest register is cutting and fierce and has a peculiar, screaming effect. The clarinet has a single-reed in its mouth-piece which is placed against the lower lip of the player.

The written compass of the clarinet is

There are three clarinets used in the orchestra; the highest of these is the C clarinet, which is non-transposing and rather sharp and incisive in tone;

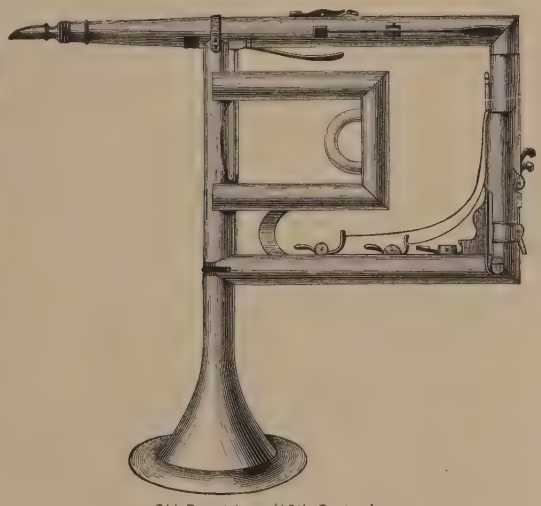


Bassoon Mouthpiece.

Oboe Mouthpiece.



Clarinet Mouthpiece.

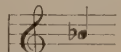


Old Basset-horn (18th Century).

it is generally used for compositions in the key of C, or in any related key where the composer desires the bright tone quality of this particular instrument.

The B flat clarinet has a deeper pitch and has the richest and mellowest tone of all the clarinets; it may justly be called the "King of the wood-wind." It is the favorite instrument of all clarinet players, who frequently use it even when the composer has called for some other of the clarinet family. It is properly used in all flat keys, its natural scale being B flat. It is a transposing instrument, sounding a tone deeper than it is written.

The third clarinet of the orchestra is the A clarinet. This has rather a dusky and gloomy quality. It is used in all sharp keys; it is a transposing instrument and sounds a minor third lower than written. That Mendelssohn well understood the color of the clarinet is proved in his symphonies, where, in passages in the key of C major, in which the C clarinet would ordinarily be employed, he calls for an A clarinet, writing the part in E flat, for the sake of the tone-color of this deepest

[1] The "chalumeau" register comprises the fundamental scale of the instrument, from its deepest note to  although Berlioz gives it a more restricted compass.

clarinet. We have already given the reasons for the use of transposing instruments (See English horn); on the three clarinets the fingering does not vary, and the player is not puzzled when, in a performance, he is obliged suddenly to lay down one clarinet and take up another because of the modulation from a flat key to a sharp one, or *vice versa*.

As regards the manner of transposition it will be understood that in a composition in F major the B flat clarinet would generally be employed, it

Basset-horn (modern shapes).

being a flat key, and it would be written in the key of G major. In the key of G major an A clarinet would generally be employed and the part would be written in B flat major. In a similar manner, if an English horn were employed in a composition in G major, it would be written in D major, as it would sound a perfect fifth deeper than its notation.

The clarinet, as many other of the wood-wind instruments, is very sensitive to heat and cold; warmth causes it to sharp very perceptibly, and the player is careful to use it a little before each performance in order that it may adapt itself to the warmth of his breath. The clarinet is cylindrical in its bore, which gives it a deeper pitch and a hollower tone than a conical tube of the same length would possess.

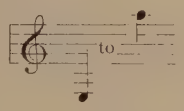
There are clarinets of still higher pitch than the ones above described, used in military bands, where any amount of noise or shrillness of tone can be tolerated, but these clarinets are altogether too fierce and strident to be admitted to the concert room; yet one of them, the E flat clarinet (which transposes a minor third higher than written) was used by Berlioz in his "Symphonie Fantastique" in the scene in the "Infernal Regions," where even the shrill-toned piccolo did not seem sufficient for the radical composer, and he therefore added this intensely bright-toned instrument.

There is among the brasses an instrument similar to the clarinet, possessing the same kind of mouth-piece, but a conical brass tube, which is called the saxophone. Because of its mouth-piece and style of fingering, which is similar to that of the wood-wind instruments, the saxophone is not classed with the brasses but generally grouped with the reed instruments. The instrument is made in all pitches, but, with a single exception, none of these have yet been used in the orchestra. The exception noted is the alto saxophone which has been introduced in the "Suite Arlésienne" by Bizet; its smooth and velvety tone, and its flexibility and ease of performance should open an orchestral future for the instrument.

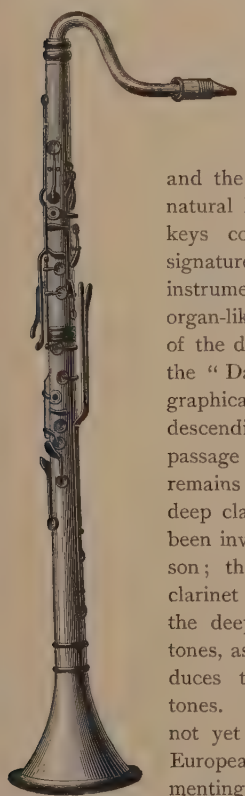
In the last century there existed an instrument which stood to the clarinet very much as the English horn stands in relation to the oboe, — a deeper, mellower tone, more masculine than the clarinet, the so-called "basset horn."

This was a transposing instrument, sounding a fifth deeper than written, and might readily be called a tenor clarinet. The instrument has become almost obsolete in recent days, which is more to be regretted since Mozart wrote many passages for it. Its tone-color was somber and funereal and it lacked the brilliancy of the clarinet, the physical reason for which may be discovered in the sharp bends of the tube. Important passages for the instrument may be found in Mozart's "Requiem," in his Masonic funeral music and in many of his operas. Beethoven seems to have used it but once, in his ballet of "Prometheus."

THE BASS-CLARINET.

This is an instrument only found in fully equipped orchestras. It is generally made in two pitches, — B flat and A. A peculiarity in the notation of clarinets up to very recent times was the fact that they were all notated in G clef whatever their pitch. Written in G clef the compass of the bass-clarinet would be

sounding a ninth or a tenth deeper, according to the instrument used.

But in recent days composers are beginning to write for these clarinets in the bass clef; Wagner, for example, has done this in "Die Walküre." Naturally the bass-clarinet in A is used for sharp keys, the key of A being its natural key; and the B flat clarinet, with the natural key of B flat, is used in keys containing flats in their signature. The effect of the instrument is very solemn and organ-like. Berlioz, in the scene of the desertion of Marguerite in the "Damnation of Faust," has graphically pictured the gloom of descending night by an obbligato passage upon this instrument. It remains only to speak of a very deep clarinet which has recently been invented in France by Besson; this is called the "pedal clarinet" and aims to produce the deepest possible single-reed tones, as the contra-bassoon produces the deepest double-reed tones. The pedal clarinet has not yet come into general use; European composers are experimenting with it, and Mr. C. M. Loeffler has used it in one of his scores, on this side of the Atlantic, but it is not likely that the reader will hear its tones sufficiently to make its study a necessity at present.



Bass-Clarinet (modern shape).

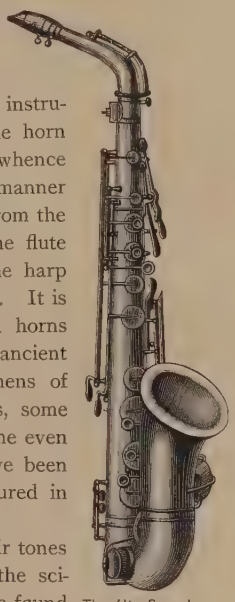
CHAPTER VII.

THE BRASS INSTRUMENTS.

THE HORN.

Germ., *Horn*, or *Waldhorn;* It., *Corno;* Fr., *Cor.*

THE horn is an instance of the derivation of some of our musical instruments from nature, since the horn of the ram or of the steer, furnished with a narrow aperture at its point, would produce a very simple form of this instrument, and the shape of the horn and its name both show whence it was derived. In like manner one can derive the drum from the trunk of a hollow tree, the flute from a rod of bamboo, the harp from the bow of a savage. It is natural, therefore, to find horns existing among the most ancient nations, and many specimens of horns of prehistoric times, some of the bronze age and some even antedating that epoch, have been discovered and are treasured in European museums.



The Alto Saxophone.

All brasses produce their tones in a similar manner, and the scientific law involved will be found in the article on the "Philosophy of Music." Briefly stated, the tone in each case is produced by vibrations of air, started by the lips of the player; the air in any tube will respond to vibrations of exactly the length of the tube, or one-half, one-third, one-fourth, or any aliquot part of the length. These vibrations will produce the fundamental tone, the octave, the twelfth, the fifteenth, etc., in regular progression according to the length of the sound waves.

The quality of tone produced by any wind instrument will vary according to the width and shape of the tube. A cylindrical tube will sound hollow and dull, a conical tube bright and clear, a wide tube hollow, a narrow tube bright. All the brass instruments have conical tubes. The quality of tone is also somewhat influenced by the shape of the mouth-piece, a shallow mouth-piece producing a bright tone, a deep mouth-piece a hollow tone. The bell of the instrument also influences

the tone, a small bell producing a thinner and less powerful tone than a large one.

The pitch of a brass instrument would depend upon the length of its tube. The fundamental tone of the long tube would be deeper than the fundamental tone of a short one in the proportion of two to one; that is, half the length of any tube will produce the octave of the entire length.

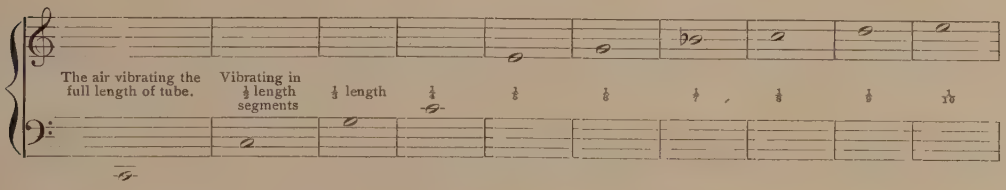
This principle is applied in the keying of all brass instruments: the keys of horns, cornets, trumpets, trombones, etc., simply adding an extra length to the tube and applying the law that a long tube sounds deeper than a short one. In the last century the orchestral brasses were made entirely without keys, and were what is called "natural instruments." The origin of the important invention which gave by means of keys a chromatic scale to these natural instruments, which could only give a broken series of tones, is involved in obscurity. Important as the discovery was, it

THE MANDOLIN PLAYER. *Franz Hals.*

is not known with any certainty to whom it is due. Its honor must be divided between some half-dozen claimants: it is probable that, as with the piano, several inventors in different lands were working simultaneously upon the same problem and attained the same practical result; yet to John Shaw, an Englishman, is due the credit of taking out the first patent for an invention of this kind (in 1824), and the famous Adolph Sax, whose name is associated with saxhorns and saxophones, greatly improved the system.

As the lips of the player produce the vibrations which are to be converted into sound, it is natural, in brass instrument playing, that these must be under perfect control; the setting of the lips against the mouth-piece, the different rates of vibration which are to produce different lengths of sound waves, the tightening or relaxing of the muscles, in short, the entire management of these members, is called the "*embouchure*," or more colloquially the "lip." A thin lip is an essential to the player of the highest pitched brass instruments.

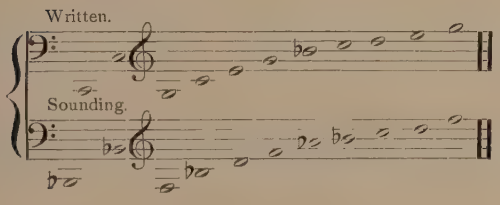
We have already stated that the horns as used by the old classical composers were without keys; a plain tube of conical shape with a proper mouthpiece can produce several tones of different pitch. Let us imagine such a tube eight feet in length played by a skillful performer; the vibrations of the entire length of the column of air in the instrument will produce great C; sound waves of quicker vibration formed in one-half the length of the tube[1] will produce small C; one-third the length of the column of air, small G; and thus in regular progression through some eight or ten tones of the harmonic series. These are the "natural" or "open" tones of the instrument, produced without keys or valves. We append a table which illustrates the series of tones produced upon the horn without keys, called by the Germans "*waldhorn*," in C.



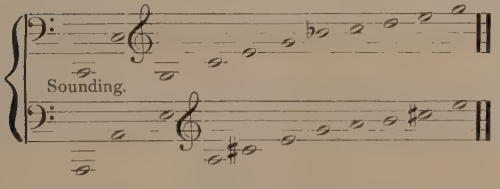
The natural horn which produces the above series is called the "high C" horn, or "C alto" horn. This horn is seldom used. Still continuing with the natural horns (for the horns with keys will come later) we find all the horns used by the classical composers transposing downwards; thus the horn in B flat, alto, would produce the above series one tone deeper; the horn in A, a minor third deeper; and thus through the series. All of these horns were written by the old composers (and are generally notated to-day) in the key of C, but sounded in the key of the actual pitch of the horn. We add a table of the tones producible upon these horns.

TABLE OF NATURAL HORN TONES.

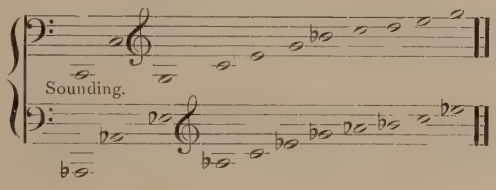
Horn in B-flat Alto.



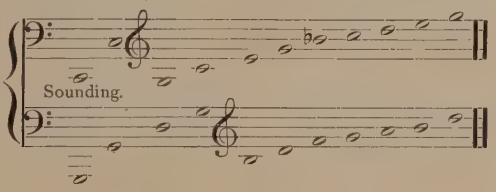
Horn in A.



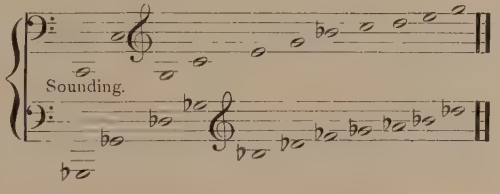
Horn in A-flat.



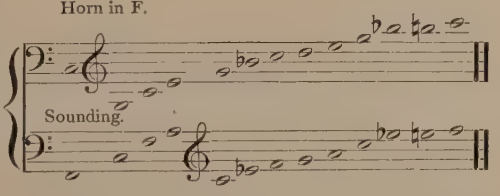
Horn in G.



Horn in G-flat.

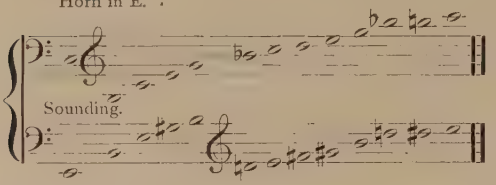


Horn in F.

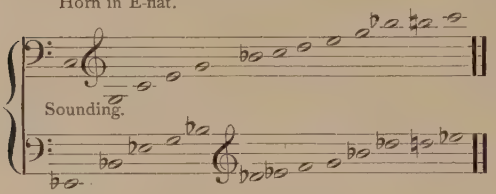


[1] The length of the fundamental "sound wave" is really twice the length of its tube, a fact which can be studied in any acoustical work.

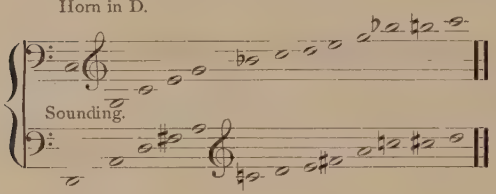
Horn in E.



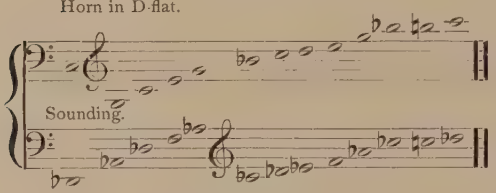
Horn in E-flat.



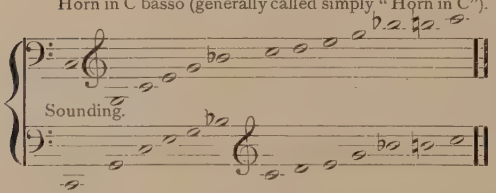
Horn in D.



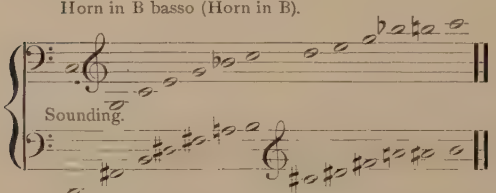
Horn in D-flat.



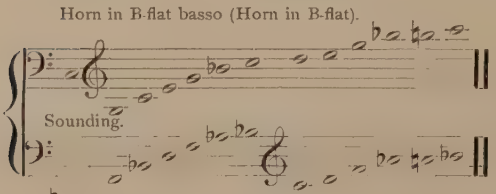
Horn in C basso (generally called simply "Horn in C").



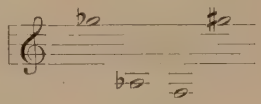
Horn in B basso (Horn in B).



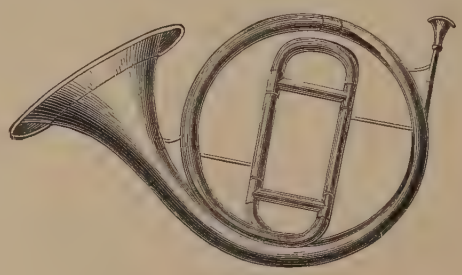
Horn in B-flat basso (Horn in B-flat).



The following tones can also be produced by a good player, but are difficult and not secure in intonation.



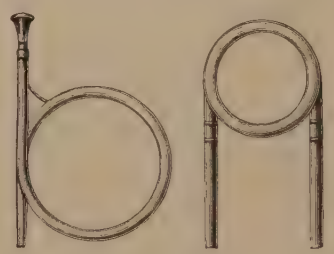
It must not be supposed, although so many different horns are specified, that the musician supplied himself with an armory of these instruments; he frequently possessed but one, and would alter the pitch of this instrument as required, by setting a "crook" of greater or lesser length into



Natural Horn.

its tube (according to the law of length of pipes already spoken of), thus making his horn an F horn, an E flat horn, a D horn, etc., as the occasion demanded.

The composer, in his orchestral work, would mark the pitch of horn required; thus, in Beethoven's "Heroic Symphony," in the trio of the



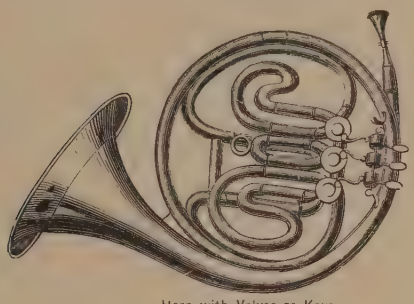
Crooks for Horn.

scherzo, the composer calls for three horns in E flat, writing them in the key of C. Before beginning the movement the player sets his horn in the key of E flat by means of the crook already specified; then plays his notes in the key of C, while his horn, now a transposing instrument, sounds a major sixth lower than the notes he is playing, therefore, in the key of E flat. The peculiar bends and twists of the tube of the horn, as with all brass instruments, are made for the purpose of

portability. The convolutions interfere in some degree with the best quality of tone, which would sound better from a straight horn; but a brass instrument which extended a dozen or more feet from the lips of the player (the usual horn is seventeen feet long) would be very impracticable.

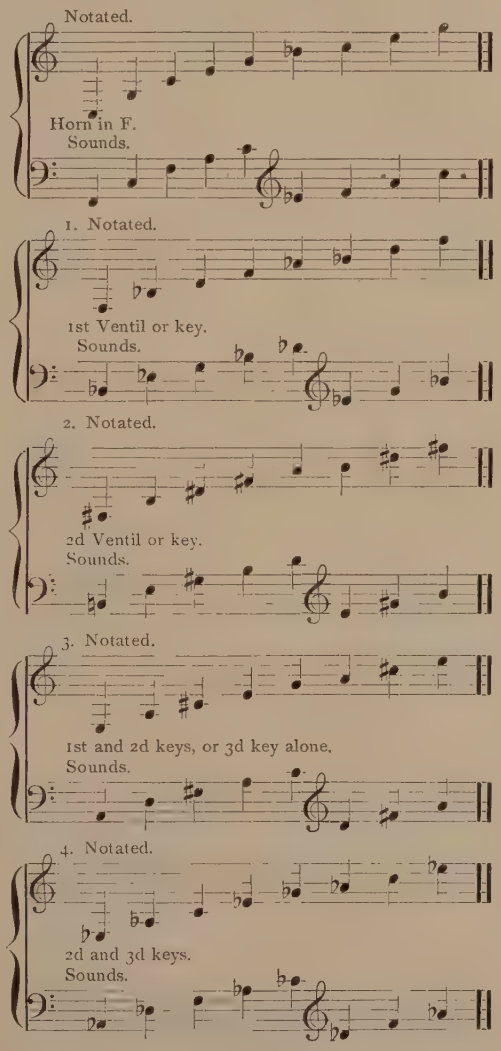
The peculiar angle at which the bell of the horn is placed is made to allow the player to place one hand in the tube; the hand of the performer is thrust into the bell of the instrument, and by its position not only modifies the strength and quality of the tones, but also deflects their pitch in some degree so that those notes which are not exactly in tune with our scale are modified into perfect intonation.

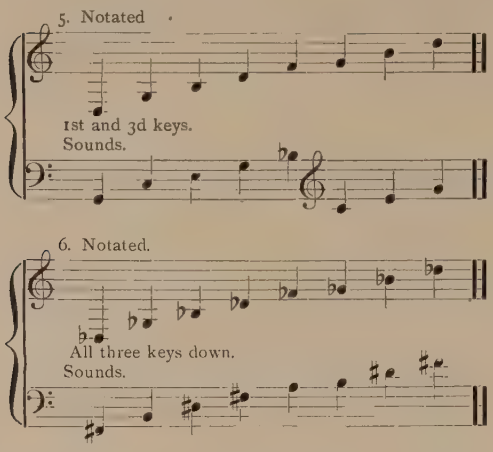
We have spoken thus in detail of the natural horn without keys, not only because it was the horn used by the great symphonic composers, but because it must be thoroughly comprehended before the student can hope to understand the horn with keys, or "valves" or "ventils." The "ventil" horn is practically a set of seven horns in one; that is, by means of the keys, seven different lengths of tube can be produced, each of these giving a different fundamental and a different series of tones, in itself. Although these "ventil horns," or "valve horns," are made of different pitches, by far the most used instrument is the horn in F. This instrument, as almost all brass keyed-instruments, possesses three keys which work in the following manner: The middle key adds a small crook to the length of the instrument; the first key a longer crook, the third key (the one furthest from the mouth) the longest crook of all; and as these keys can be added to each other, combining their crooks together, it will be seen that seven lengths are possible upon the instrument. We add a table of the tones which can thus be produced, merely reminding the reader, at the outset, that the natural series of the horn would be in F. The middle key would lower this series a semi-tone; the first key a tone, the third key (or first and second together) a minor third, the second and third keys a major third, the first and third a perfect fourth, the first, second, and third a diminished fifth; and as each key adds something to the length of the tube, it will be comprehended that they can only lower, not raise, the original series. It naturally happens that sometimes a tone can be produced in two or three different ways upon the instrument, but the player will by experience know just which combination is most practical in each case.



Horn with Valves or Keys.

TABLE SHOWING THE USE OF VALVES UPON AN F HORN.





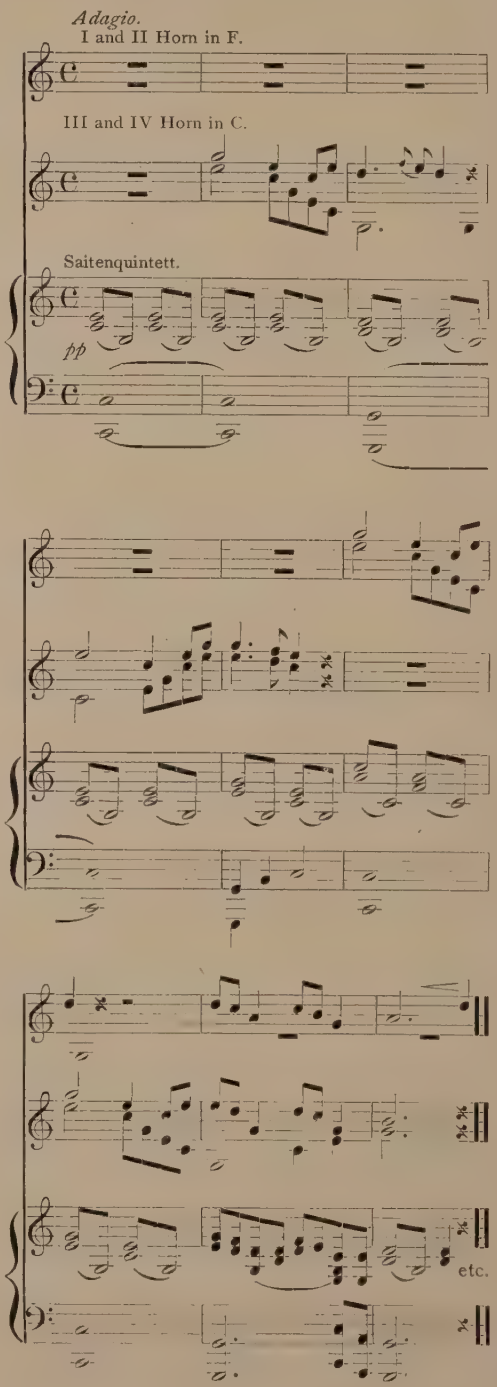
Horn players become accustomed to certain registers on their instrument, and they are generally given a position in the horn quartet calling chiefly for these pitches; thus the first horn player will busy himself chiefly with the highest notes; the fourth horn player will generally be confined to the lower pitches.

The keyed horn, of course, produces a full chromatic scale, and the difficulty which the old composers contended against, of producing suitable melodies upon a broken series of tones, has wholly disappeared; yet it would be well for the reader to remember, when examining the charming modulation of the horns in the third movement of the "Heroic Symphony," to recall the fact that this was written for natural horns, giving only the E flat series of tones.

Among the composers for the instrument without keys, Weber stands preëminent; in some of his horn passages he skillfully unites two series of tones on different horns, thus obtaining control of a sufficient number of tones to construct beautiful melodies. The great horn quartet in the overture to "Der Freischütz," is an example of this skillful combination. We append a part of this that the reader may form some idea of the difficulty of horn combinations before the era of the keyed horn.

Exactly as the clarinet players preferred the B flat clarinet to all other pitches, the trombone players a B flat trombone to all other trombones, so the horn player of to-day almost invariably employs a keyed horn in F. The old manner of notation, therefore, that of writing the horns in C and setting them in the key of the composition, is

HORN QUARTET FROM "DER FREISCHÜTZ" OVERTURE.



now rather a hindrance than a help in most cases. A few composers have become cognizant of this fact, and are beginning to write the horn as if it were an English horn standing in F, a fifth above the actual notes which it produces; but the great majority still write the horn parts in the key of C.

The tone-color of the horn is mellow and romantic; it is used for hunting signals and in almost all forest pictures; it is the tenderest and mellowest-toned brass instrument in existence, but its tone-color can be totally changed and the instrument made to produce the ugliest tone possible in the orchestral score, by pressing the hidden hand firmly in the tube and playing with power. Tones thus produced are called "muted" or "stopped" tones, and are often used by composers when picturing something revolting or evil, in their scores. Wagner uses the muted tones thus in the third act of "Tannhäuser," where the hero determines to return to the Venusberg; in the third act of the "Flying Dutchman," where Senta is spurned and rejected; in the "Götterdämmerung," at the stabbing of Siegfried, etc. The same composer calls for eight horns in his famous "Ride of the Walkyries." The stopping of the tone of the horn not only alters its quality, but can lower its pitch a semitone. The "stopped" tones ought never to mingle with the pure, rich, open tones of the instrument.

We have been somewhat explicit in our description of the horn, since the principle involved in its playing, the lowering of the pitch by means of keys, and the combination of several instruments of different lengths in one, is found upon *all* the other brass instruments which follow.

The horn may be considered the most delightful of all the brass orchestral instruments; it has been used prominently in hundreds of orchestral compositions, yet in the first half of the eighteenth century critics thought it "vulgar"! Rossini, in the overture to "Semiramide," and in the overture to "William Tell," Beethoven in his "Heroic Symphony," in his great septet, and in his sonata for horn and piano, Weber in all his orchestral works, proved that even the natural horn with its limitations of tone was still a most effective instrument. With the addition of valves or ventils, the horn has become the most important instrument of all the brasses.

CHAPTER VIII.

TRUMPETS AND CORNETS.

THE TRUMPET.

Germ., *Trompete;* Fr., *Trompette;* It., *Tromba.*

THE trumpet like the horn is one of the most ancient of instruments; more than twenty trumpets exist which were used in the bronze age, and the Scriptures, and the writings of the old Roman and Grecian authors are full of allusions to this martial instrument. In explaining its tone series we but reapply the theories given in the preceding chapter with one important modification; the tube is much narrower (as well as shorter) than that of the horn. It is a law of nature that a tube of a certain determined length will produce a certain fixed tone; thus, an open conical tube about two feet long[1] will produce one-lined C, the middle C of the pianoforte; a similar tube sixteen feet long will produce a tone corresponding to that of the deepest C of the same instrument. But if a tube be narrow its fundamental tone may be obliterated altogether, or may only sound with the faintest power.

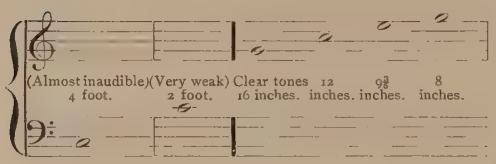
Natural Trumpet.

Let us take an illustration from the simple post-horn used on tally-ho coaches and frequently heard in our streets. This is a straight, open conical tube four feet in length and ought, therefore, to sound "small C," but its tube is so narrow that this note can only be heard in the faintest whisper; the next note it would produce would be formed by the division of the vibrations into segments one-half the original length, therefore, an octave higher in pitch; but this tone also is faint and unreliable because of the narrowness of the tube; the next tone, a perfect fifth higher than the last, rings out clearly and boldly, and is caused by segments one-third the original length of the column of air; sound waves one-fourth of

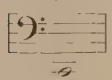
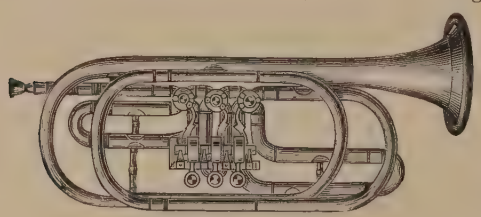
[1] The diameter would slightly affect the pitch.

the length produce a note a fourth higher; one-fifth of the length, a major third higher; one-sixth of the length, a minor third higher; if the lip of the player be thin and well trained he can produce still higher tones, but generally the above constitute the entire series, and all the tally-ho coaches calls are founded on these four notes. The bugle (without keys) is practically the same instrument but with a bent instead of a straight tube.

TONES OF A TALLY-HO HORN FOUR FEET LONG.



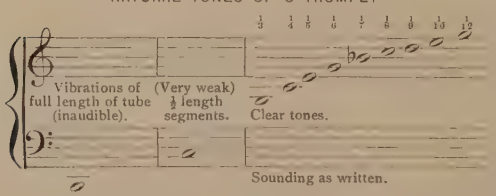
The length given is that of each segment of the vibrating column of air.

Turning to the trumpet we find the same principle involved. There is present, in the trumpet in C, a tube eight feet long which should give as its lowest note. This note is not heard because of the narrowness of the tube. The next note, an octave higher than the fundamental, is also absent from the same cause, but the remaining



Trumpet with Keys.

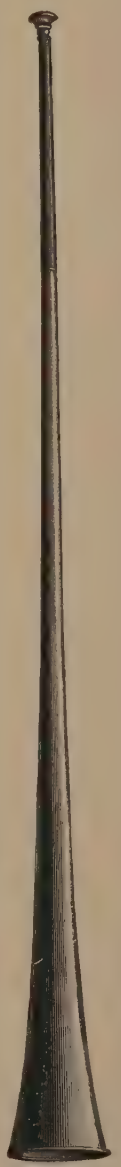
notes of the series are clear and penetrating. The tones produced upon the trumpet in C are as follows:

NATURAL TONES OF C TRUMPET



The missing tone of the above series (a sound between F and F sharp), produced by segments of one eleventh the length of the tube, is impure in intonation, but can be produced by "stopping."

The trumpet was a favorite instrument with both Bach and Händel, and we find passages in their works which are of the most brilliant and florid character, amazingly difficult even to the performers of the present day. There is little doubt that the tubes of their trumpets were narrower than those of the instruments of the present, producing the higher passages more readily than would be possible upon modern instruments.



Post-horn.

But there is also little doubt that trumpet playing was more cultivated and reached a higher development in the time of the oldest composers than at present. The cause of this is found in the fact that in mediæval times the trumpet was extremely fashionable as a gentleman's instrument; kings and princes attached trumpeters and heralds to their persons, and trumpet playing was frequently called the "heroic art" at that time. A guild of trumpeters was formed in the latter part of the middle ages which existed to the middle of the eighteenth century and reckoned many noblemen among its members. Under such circumstances it is not wonderful that trumpet playing reached its zenith before the great orchestral composers came upon the scene. Händel seemed to revel in the use of the instrument and frequently used it as a counterpoise to a broad, dramatic voice, as witness the duet between soprano and trumpet in "Let the Bright Seraphim," and bass and trumpet in "The Trumpet Shall Sound."

In the classical period, the time of Beethoven, Mozart, Weber, etc., the natural trumpet entered into a period of decadence, and the keyed trumpet had not been invented. It was, therefore, found next to impossible to play some of the florid passages in the Händelian scores, and we find Mozart altering them freely and transferring many passages from the trumpet to the clarinet. We do not find in the scores of Beethoven one difficult trumpet passage; the most important can be discovered in the "Leonora"

VIENNA MUSIC HALL.

overtures No. 2 and No. 3, but even these cannot be classed as essentially difficult.

The old trumpets were set in different keys like the natural horns, and like them were written in the key of C. This notation is still employed by almost all composers. With the invention of the keyed trumpet the instrument once more came into prominence and modern composers have used them most freely in orchestral scores. To Wagner is due the chief and most important use of trumpets in modern orchestration; he frequently uses them upon the stage for purposes of historical accuracy, and in such cases generally demands the natural trumpet without keys, the instrument of the old masters. Upon these instruments he sometimes gives the most extended "fanfares" (or flourishes), as, witness the trumpet passage at the

Crooks for Trumpet.

entrance of the Minnesingers in "Tannhäuser," and the call of the trumpeters at daybreak in the second act of "Lohengrin."

Like the horn, the trumpet appears in different pitches, but while the horn transposes downward there are some trumpets which sound in a higher key than their notation. The trumpet in

F, sounds a perfect fourth higher than written,
E natural, a major third higher,
E flat, a minor third higher,
D, a major second higher,
C, as written,
B flat, a tone lower,

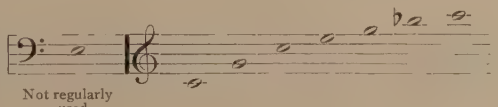
and a few others besides these are sometimes found.

The B flat trumpet is the favorite with many players. The tone-color of the trumpet is martial and inspiring, and one can only regret that the rather noisy cornet is allowed to substitute for it in many an American orchestra. Stopped tones are possible upon the trumpet, yet are not often used because of their unpleasant quality. Wagner, however, experimented even with these, and in the last act of the "Mastersingers of Nuremburg" uses them to imitate the effect of toy trumpets, as the guild of toy-makers enters the scene.

In Wagner's trilogy we find a bass trumpet, an instrument an octave lower than the ordinary trumpet, and, therefore, of about the pitch of the horn. It has three keys according to the keying-system already described, but its tone does not achieve the nobility of the trumpet nor the bold menacing character of the trombone. In the same great work we find a contra-bass trombone, an instrument much deeper than the regular family of trombones (which we are to examine in the next chapter), but neither the bass trumpet nor the contra-bass trombone will be found frequently enough to demand more than this passing mention.

THE CORNET.

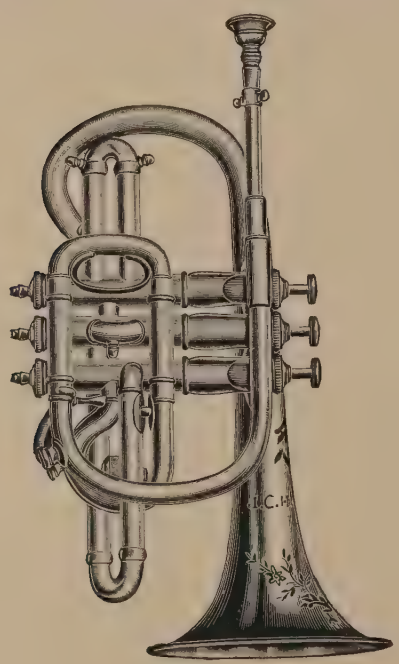
The cornet is a comparatively modern instrument, which, unlike the trumpet and the horn, has never been made as a plain tube, but has from the beginning been supplied with keys or valves which produce the entire scale upon the instrument; its very name would indicate this, for it is called the "cornet à pistons." Its practical compass is very much like that of the trumpet, yet its tone quality is different and inferior; the cause of this is found in the fact that while the trumpet is a long and narrow tube, beginning its series of tones upon the second over-tone, the cornet is a short, wide tube and begins its practical series upon its first over-tone. The tube of the cornet is, therefore, about half the length of that of the trumpet. The cornet in C would present a tube four feet long; its lowest tone, therefore, being small C . This tone would speak but insecurely in its tube, although it can be produced by a skillful player with thin and flexible lips. Its practical tone series beginning with the first over-tone would be as follows:



Not regularly used.

The favorite cornet, however, is not in C but in the key of B flat (sounding a tone lower than writ-

ten) and would present the above series a tone deeper than notated. This instrument would suit best to flat keys, although a skillful player might produce passages with sharp signatures as well; but the addition of the crook, an added length of tube, would elongate it sufficiently to make its series sound in A, which would fit it for the sharp keys. It must be borne in mind that in writing for any brass instrument we desire to use its open tones, those produced without the aid of keys, as frequently as possible, since the keyed tones are somewhat inferior in quality to those produced without the aid of the additional crooks. Al-



Cornet.

though the B flat cornet is the most frequently used of all these instruments, occasionally a small cornet in E flat is heard in military bands. This instrument sounds a minor third higher than written, and has a very strident and incisive tone.

In American orchestras it has become customary, with few exceptions, to use the cornet whenever the trumpet is called for; the players in the smaller cities are far more frequently called upon to play the cornet in brass bands than to perform upon the trumpet in orchestra; hence their embouchure becomes adapted more to the mouthpiece of the cornet than to the shallower mouthpiece of the trumpet, and they avoid the latter instrument.

Berlioz has attempted a new tone-color in the brasses by using cornets and trumpets together; in this he has not been copied by composers of other nations who have constantly, in orchestral scores, passed by the cornet, and used the trumpet alone. Yet the great flexibility of the cornet fits it well to florid music, and it is often used in operas where rapidity of execution and much embellishment are desired. Halévy in the "Jewess" (in which opera we find the first orchestral use of the valve horn), Donizetti in "Lucia di Lammermoor," Meyerbeer in the "Huguenots," and many other operatic composers, particularly those of the French school, have used the cornet.

In order to change rapidly from flat keys to sharp ones, in sudden modulations, cornets have been manufactured in which a permanent extra length of tube, or crook, is attached to the instrument, and can be opened or closed at will; when this is closed the cornet would be in B flat or E flat, and play in flat keys; when it is open, it would be in A or D, and be a suitable instrument for the sharp keys.

CHAPTER IX.

TROMBONES AND TUBA.

THE TROMBONE.

Germ., *Posaune*; Fr. and Ital., *Trombone.*

THE trombone is a deeper instrument built upon the plan of a trumpet, with a long and narrow tube; as narrow tubes give bright and incisive qualities of tone, the trombone has a heroic and military tone-color, which, in its deeper notes, contains something of threat and menace. Trombones have been used by even the earliest composers, but the full effect of the tone-color of this instrument is scarcely found in scores before the time of Mozart, who seems to have thoroughly understood its character; the first three chords of the "Requiem" of this master go beyond anything that had been written for trombones up to this time (1791), and sound as if the gates of eternity were swinging open; and his use of trombones accompanying the response of the *Commendatore* to the invitation of Don Giovanni, in the opera of that name, fully illustrates the menacing character of the instrument, alluded to above. Later composers frequently abuse the trombone,

and in their hands it becomes merely blatant and a noise-producing instrument; in some scores the trombone, like charity, "covers a multitude of sins."

In the last century four pitches of trombones were employed, — soprano, alto, tenor, and bass; of these the soprano has disappeared altogether, and, although Berlioz laments its loss, we cannot conceive of it as being vastly different from a deep-toned trumpet. The alto, tenor and bass trombones are used frequently in modern music although not regular instruments of the classical orchestra.

Although these three pitches of trombones are called for, it occurs with the trombone as with the clarinet, that the musician has a decided preference for one pitch of instrument; the clarinetist often uses the B flat clarinet in defiance of the will of the composer, and many orchestras whose scores call for alto, tenor and bass trombones present all three parts upon tenor, or B flat, trombones.

The trombone is treated as a non-transposing instrument in America and Germany, its notes being written exactly as they sound; in France, however, the instruments are treated as transposing.

The alto trombone is the smallest of the group and possesses the shortest tube, therefore, the highest tone-series; its deeper register is weak, but the instrument is brilliant and effective in its higher tones; it is called the E flat trombone from the fact that (with closed slides, or without touching its keys) it gives the harmonic series of E flat.

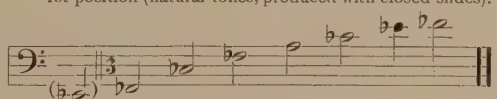
The tenor trombone is a B flat trombone and its natural series is that of B flat. The bass trombone is more frequently in F (although it can appear in other pitches) and it would give the harmonic series of that note without touching key or slide.

In the preceding sentence we have spoken of "keys" and "slides"; it will be gathered from this that the trombones are made upon two systems: The keyed system is precisely like that explained in connection with the horns, and this manner of keying is present upon all brass instruments of the orchestra which possess keys; but we have already stated that the keyed tones of any brass instrument sound poorer and less effective than the open tones; the cause of this is found in the extra bends or convolutions of the tube, which are opened by these keys and added to the length of the instrument; the nearer we approach to a straight tube the better the tone of the brass instrument will be. An effort has been made in this direction with the trombones, where the keying has been set aside (in the best class of trombones) in favor of a direct lengthening of the tube by means of slides. The tube is made of two pieces, one overlapping into the other, and the trombone player can lengthen his instrument (if it be a slide trombone) by drawing out its lower section. Thus in the slide trombone the tones are much more nearly of one quality than they are on the valve trombones, where the use of keys forces the air through extra bends of the tube.

In order that this system may be fully comprehended, we add cuts of the slide trombones with their various drawn positions; it will be seen that each position presents an instrument of a different length, and each of these instruments gives its own series of tones. A table of the compass of the slide trombones may be easily comprehended.

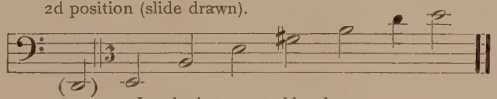
ALTO (E-FLAT) TROMBONE.

1st position (natural tones, produced with closed slides).



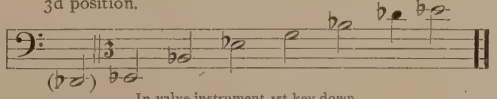
In alto valve trombone this is produced without touching the keys.

2d position (slide drawn).



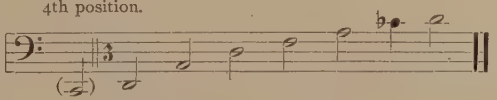
In valve instrument 2d key down.

3d position.



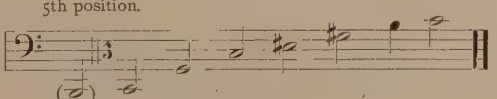
In valve instrument 1st key down.

4th position.



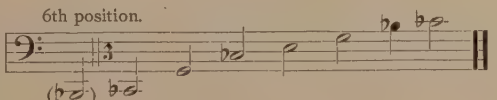
In valve instrument 3d (or 1st and 2d) keys down.

5th position.

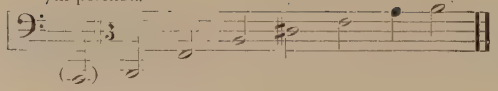


In valve instrument 2d and 3d keys down.

6th position.

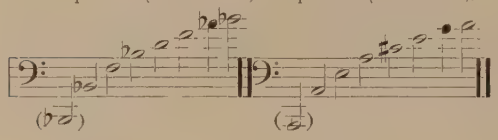


In valve instrument 1st and 3d keys down.

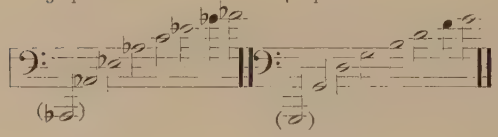
7th position.

In valve instrument all keys down.

TENOR (B-FLAT) TROMBONE.

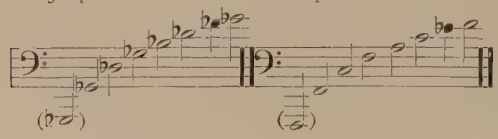
1st position (closed slides). 2d position (slide drawn).



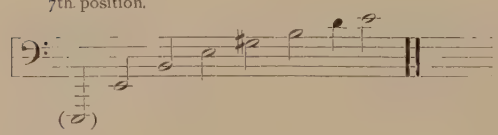
3d position. 4th position.



5th position. 6th position.



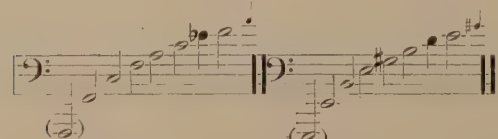
7th position.



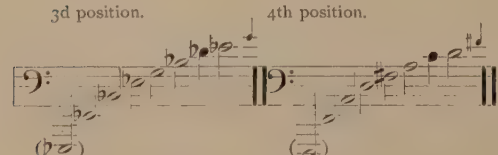
The notes given in parentheses are the so-called "pedal-tones," the actual fundamentals of each length of tube; they are difficult to produce and are seldom used in orchestral works. The notes marked in black are somewhat out of tune on the valve trombone. The bass F trombone would be a fourth deeper than the tenor, as in following table:

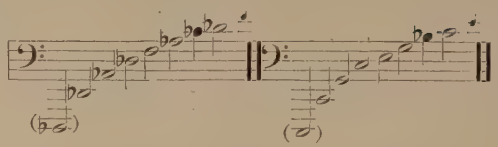
BASS (F) TROMBONE.

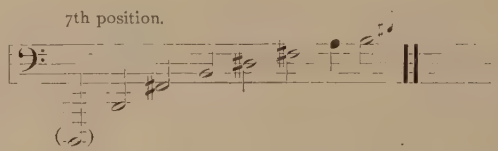
1st position (closed slides). 2d position (open slides).



3d position. 4th position.

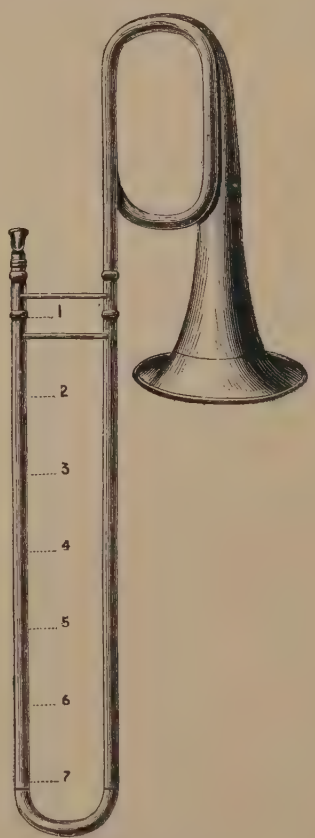


5th position. 6th position.

7th position.



The deeper pedal tones are well-nigh impossible.

The valve trombone or trombone with keys is worked upon the principle of the horn, the cornet,



Slide Trombone.

With any drawing beyond the seventh position the slides would come apart.

the keyed trumpet, and all other brasses of this kind, the middle key lowering the series a semitone, the first key a whole tone, the third key a

minor third, etc. The keyed trombone, because of its many and sharp bends in the tubing, can never give as good a tone as the slide trombone, where the bendings of the tube remain unaltered throughout the entire register.

In presenting the table of trombone tones the reader may have observed that we have placed the fundamental in parenthesis in each case; this tone is possible, although difficult to produce, upon all trombones. It requires a very loose lip and great steadiness of blowing. It is so precarious that few composers have dared to use it in their orchestral scores, although it appears in many trombone solos. It is called the "pedal tone." It will naturally be understood that if the "pedal tone" is produced by closed slides its pitch will be varied at each drawing of the slide of the instrument; it, therefore, follows that a series of pedal-tones are possible upon each trombone. But this series grows more difficult with each descending tone, and few trombone players can produce more than four. The "pedal tones" have a peculiar, gruff quality. Berlioz has attempted their use in his "Requiem" on the bass trombone in combination with the *highest tones of the piccolo*, in an endeavor to picture immensity, but the attempt to mingle oil and water has not succeeded, and this combination must be regarded as one of the weakest points of the "Requiem." The series of "pedal tones" upon the three trombones would begin with the fundamental tone of each instrument, and descend four semi-tones.

With the careless composer the trombone is almost always used as an instrument of noise, but great masters have often used the trombone for expression rather than for power. The old-fashioned use of the trombone, before Beethoven's time, was an especially weak one, for the instrument was combined with the contra-bass to give a heavy bass to certain compositions.

In old England we have found scriptural names applied to some of the instruments, as witness the

Valve Trombone.

title "Shawm" applied to the clarinet; it is, therefore, not astonishing to find the trombone in Elizabethan times entitled the "Sackbut."

Beethoven fully appreciated the power of the trombone, and was the first to introduce it into symphony. The use of trombones in the finale of the Fifth Symphony is the earliest example of their employment in such classical music, and the composer subsequently used them in his Sixth and Ninth Symphonies. That Beethoven understood their menacing character is evidenced by his signing a scolding letter to his publisher, Schott (in 1826), with a trombone trill, thus:

16 fuss trombone minacciando

Schubert loved the instrument, and some of the most masterly applications of the trombone are found in the finale of his great symphony in C major. Berlioz has probably made the most wholesale use of the instrument, and in the picture of the day of judgment in his "Requiem," we find among a mass meeting of brasses, *sixteen* tenor trombones!

BASS—TUBA.

There have been two changes in the deepest part of the brass band within the last century. A little over a hundred years ago the brasses found their bass in a most wretched instrument called the "serpent." This noise-producing terror of the ancient orchestra was made partly of wood or metal, and partly of leather, and a view of the accompanying cut will fully explain the origin of its name. Anything more raucous than its tone can scarcely be imagined. It was soon supplanted by a brass instrument which, however, had not the modern brass keying, called the "ophicleide," an

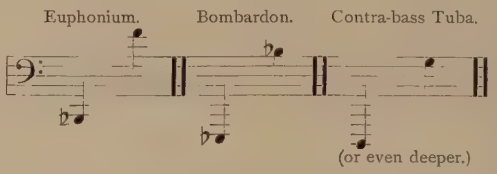
awkward name, being a combination of two Greek words signifying "snake" and "door-key." The tone of the ophicleide was not a great improvement upon the serpent; it still possessed a rasping, roaring quality which is absent from the modern orchestra; yet just this quality, ugly though it may be, may occasionally be desired by the orchestral composer. Mendelssohn used it in his "Midsummer Night's Dream" overture, when he pictured the drunken weaver, Bottom, snoring in uneasy slumber amidst the fairies, and although the modern conductor substitutes the bass-tuba for the semi-obsolete ophicleide, we fear that the snoring effect has been lost to the modern concert-room forever. The ophicleide is, however, often heard in France and England, although America and Germany have allowed it to become obsolete.

From serpent to ophicleide was but the first step of the improvement of the bass of the brass

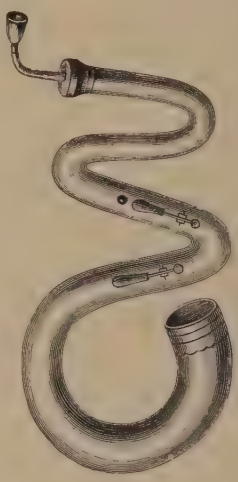
Bass Tuba.

band. A German band-master named Wieprecht soon brought forth a better instrument which was to replace the ophicleide. This was the bass-tuba.

The bass-tuba is made in different pitches. It is of about the compass, but not of the tone-color of the bass trombone. The tubas can give the full chromatic scale between the following notes.



In Germany and America the tuba is treated as non-transposing. It is made in different pitches, and its color in the deepest register is ponderous and brutal. Wagner thoroughly understood this when he caused the relentless character of Hunding, in "Die Walküre," to be pictured upon four tubas.



The Serpent.

In describing the keys of the brasses we have hitherto spoken of three valves. In some of the deeper brasses a fourth key is added, in order to avoid too much combination of keys. This fourth key lowers the pitch of the instrument a perfect fourth, and gives all the harmonic series from this fundamental.

The French generally name the bass-tuba "Bombardon." The higher tubas are called "Euphoniums"; the deepest tuba is called the "Contra-bass Tuba."

CHAPTER X.

INSTRUMENTS OF PERCUSSION.

These may be broadly classified in two groups, those having definite pitch, and those without pitch, the latter being used purely for rhythmic effects. Of the instruments of percussion only one is a permanent member of the classical symphony orchestra. The kettle-drums, giving definite tones, have been used from the time of the first orchestral composers, as regular instruments in the orchestra, although the early composers employed them in a very restricted manner.

THE KETTLE-DRUMS.

Germ., *Pauken;* Fr., *Timbales;* It., *Timpani.*

The English name in some degree illustrates the shape of the instruments, which are similar to metal cauldrons, but have a hole at the base to admit of a free vibration of the air confined within the instrument. The kettle-drums are never used singly in a score, a pair being present if the instrument is used at all; and in modern scores three or four kettle-drums are not uncommon.

Each kettle-drum gives forth a definite note, the pitch of which can be changed by means of screws surrounding the drum-head, which tighten the calf-skin or sheep-skin top. The two drums are of different sizes; the larger is called the "G" drum,

Kettle-drum.

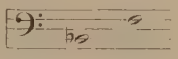
the smaller the "C" drum, from the fact that in old times the note "G" was written for the one and "C" for the other, whatever note was played. The body of the kettle-drum is of brass or copper.

The notation of the instrument is peculiar; no accidentals are written in its part, but at the beginning of the score the composer names the notes to which he wishes the kettle-drums tuned; thus "Timpani in B flat, E flat" would indicate definitely what notes could be elicited from the instruments, but the score would show simply the notes of B and E.

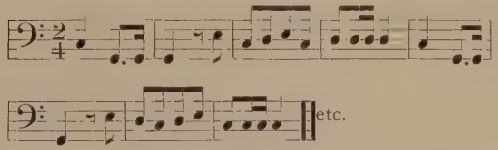
The old composers, even Bach and Händel, used kettle-drums chiefly for rhythmic effect. It was Beethoven who first liberated the instrument; already, in his First Symphony, he shows a disposition to give prominence to this humble instrument; and in his Ninth Symphony the kettle-drums present as definite a figure at the opening of the scherzo as the violins themselves.

Since we can obtain but a single note from each kettle-drum, it is natural that we should tune our pair of drums to the most important two notes of the scale, the tonic and dominant; and these two notes are generally the ones called for; yet Beethoven in his Seventh Symphony, scherzo movement, tunes the drums in sixths, and in his Eighth and Ninth Symphonies allows them to play octaves. The G drum can be tuned to any note in the following compass:

The C drum would represent the following compass:

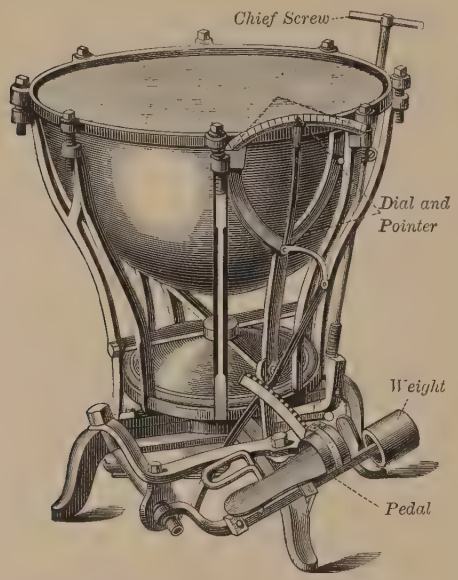


What melodic effects can be produced with the kettle-drums is most clearly shown by Meyerbeer, who, in his second act of "Robert le Diable," uses four kettle-drums tuned as follows:

and upon these four drums plays an entire march.

Occasionally, in an endeavor to make a freer use of kettle-drums than would be possible with two notes, the composer allows the player to retune his instrument during the progress of the composition, thereby obtaining new tone material. This change is always difficult work, and time must be allowed to the kettle-drummer to tighten or relax the screws which control the drum-head. The difficulty of this mode of obtaining extra kettle-drum notes has led to the invention of several systems of quicker tuning. "Machine-drums" are now made which, after being set in G and C, can, by the movement of a pedal, be changed to any other note in their compass.

The quality of the instrument is explosive, but its tone-color is materially modified by the kind of

drum-stick used. Almost all kettle-drummers employ two sets of drum-sticks (painted of different colors for ready recognition), and some use three sets; the softest of these possess sponge tips, the



Machine Kettledrum for instantaneous change of pitch.

next set leather, and the third set, used for the most explosive effects, has wooden tips.

Notes of different lengths can be executed upon the kettle-drums, the tone being checked, when required, by the hand of the player. Muted tones are produced by placing a cloth over the drum-head; and trills are frequently written for the instrument. These so-called "trills" are really "rolls" upon the drum, and not an alternation of two different notes as in a piano trill.

Wagner has succeeded in picturing anxiety and suspense upon the kettle-drums by causing them to give soft tones in an irregular rhythm, while all the rest of the orchestra is silent; just as a tiny candle might serve to make darkness more visible, this tiny sound upon the kettle-drum causes an orchestral silence to become the more impressive. Such anxious moments are pictured upon the kettle-drum in "Lohengrin" at the death of Telramund; in "The Flying Dutchman" at the meeting of that hero with Senta; in "Götterdämmerung" at the stabbing of Siegfried; and in many other scenes in the Wagnerian musical dramas.

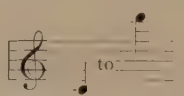
Berlioz made many bold experiments with kettle-drums. In his "Symphonie Fantastique" he causes the muttering of distant thunder to be given by a chord upon three kettle-drums; and this use of harmonic structure upon the instrument is pushed to its greatest extent by the same composer in his "Requiem," where, in portraying the Day of Judgment ("*Dies Irae*"), he employs sixteen kettle-drums, with ten drummers. This probably is the most wholesale use of the instrument that ever will be made.

Among other remarkable uses of the instrument one might mention the sudden explosive stroke in Haydn's "Surprise Symphony," where, in a gentle movement, the kettle-drum suddenly startles the audience, which has been lulled to repose, — a bold, practical joke,—for a symphony. Beethoven, in his violin concerto, gives the chief figure of his first movement, four impressive, rhythmic strokes, upon the kettle-drums repeatedly; at the end of the first movement of his "Emperor" concerto he causes the kettle-drum to join in a duet with the piano; and in his Eighth Symphony he allows the instrument to join in duet with the bassoon.

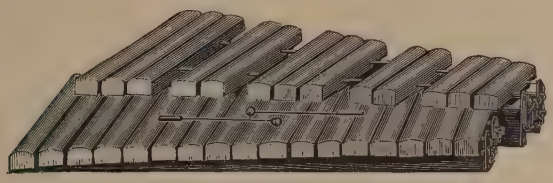
Other instruments presenting definite pitch, but not regularly found in the orchestra, are the *Glockenspiel*, bells and xylophone. The *Glockenspiel* (Fr., *Carillon*) consists of a set of thin, flat plates of steel, which are struck with a mallet, giving forth a tinkling, sweet, bell-like tone, not unlike what one could elicit from a cut-glass goblet. Mozart used this tinkling instrument in a long passage in his "Magic Flute." Wagner has employed it in the "slumber scene" at the end of Die Walküre,

Glockenspiel.

and even in his great sacred work of "Parsifal." The usual compass of the *Glockenspiel* is as follows:

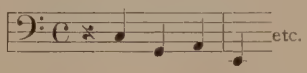


Although the instrument is made in various pitches, it sounds (like the piccolo) an octave higher than written; and it is sometimes furnished with a keyboard like a piano for ease of playing.



Xylophone.

Bells are sometimes required by the composer, but it has always been a point of difficulty to bring these to the proper pitch and to use them effectively in a score. In "Parsifal" Wagner uses four bell-tones as follows:



In the "Huguenots," Meyerbeer uses a bell to picture the tocsin of Saint Germain which gave the signal for the famous (or infamous) massacre of Saint Bartholomew; Verdi uses a funeral bell in the "Miserere" in "Il Trovatore;" Berlioz uses two bells in the finale of his "Symphonie Fantastique."

Many have been the devices to bring these bell-tones to the best effect; generally a long, thin bar of steel is suspended upon a frame and struck with a wooden mallet, but in recent days the invention of tubular bells has led to a better effect than any preceding device.

The *xylophone* is also an instrument of definite pitch; it consists of a number of bars of wood of different lengths which are struck with a mallet and give forth a knocking, explosive tone that can scarcely be called musical; yet even this instrument has been appropriately employed by Saint-Saëns in his "Danse Macabre," where a revelry of the skeletons is being depicted, and in the height of the scene the xylophone pictures the bones of the skeletons knocking together as they dance, a gruesome effect which only this instrument could portray.

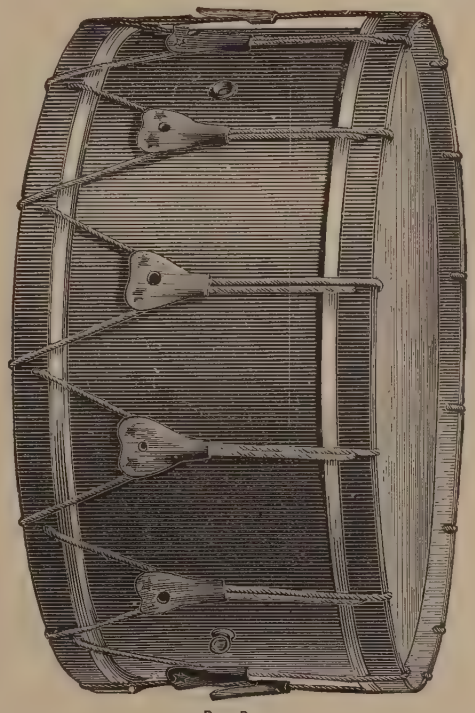
INSTRUMENTS OF PERCUSSION WITHOUT PITCH.

THE BASS-DRUM.

Germ., *Grosse Trommel;* Fr., *Grosse Caisse;* It., *Gran Tamburo*, or *Gran Cassa.*

The bass-drum is very sparingly used in classical orchestral works. In Beethoven's Ninth Symphony we find it appearing in the finale; Haydn employed it in his "Military Symphony" in G; and other instances might be named, but generally the bass-drum is absent from the symphonic orchestra. Since the instrument is not used to give a definite note, its notation is a matter of comparative indifference, simply denoting the length and rhythmic value of the sounds, and their relative position in the score. The bass-drum is frequently written in the G clef, on a single note, as also are all the instruments which follow.

In brass bands and in small orchestral works the bass-drum is frequently united with the cymbals and played by the same performer; but where a proper effect of cymbals is desired, this is impossible. The effect of the bass-drum is royally abused by many of the lesser composers who cannonade forth their passages upon the instrument with the utmost power; yet an effect of delightful



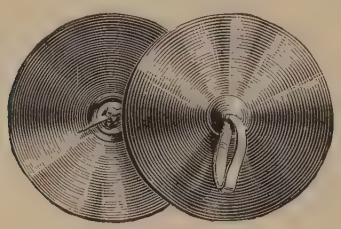
Bass-Drum.

mystery and weirdness can be obtained by soft strokes upon the bass-drum. Berlioz has attempted a trill upon the instrument with two drum-sticks (the bass-drum has but one stick) but the innovation seems not to have taken root.

CYMBALS.

Germ., *Becken;* Fr., *Cimbales;* It., *Piatti*, or *Cinelli.*

This instrument comes into the orchestra from the Orient, probably from Turkish or Arabic sources. Its material is a blending of copper and tin, and by the clashing together of its two plates there is given a suggestion of combat that is at times very effective; even a staccato effect can be produced upon the cymbals, the player quenching the tone by placing the instrument suddenly against his person; a feverish, wild



Cymbals.

gaiety would occasionally bring the cymbal into prominence; and Wagner uses them thus in the Venus scenes of "Tannhäuser," where he also obtains a mysterious tremolo by rattling, not clashing, the cymbals together; at times, too, an especially strong and accented tone can be obtained from a single cymbal by hanging it up and striking it with a drum-stick; the last note, if it can be called a note, of the "Symphonie Fantastique" is thus given.

THE GONG.

Even the gong, or *tam-tam*, an instrument of Chinese origin, fulfils its function in some orchestral scores. Its tone is blended with "by-tones" (not harmonics), which causes an impressive dissonance when the instrument is struck. Any cataclysm or great catastrophe might legitimately require the gong effect; the fall of the Tower of Babel, the plunge of Mephistopheles with Faust into the infernal pit, might call for a strong blow upon the gong; but the soft effects of the instrument are equally effective, and can herald anything uncanny, weird or supernatural; such a stroke is found in Meyerbeer's "Robert le Diable" just before the rising of the nuns from their graves, and in Rossini's "Semiramide," at the opening of the tomb of Ninus, and the approach of the spectre of that Monarch; even the conservative Cherubini uses a gong-stroke in one of his requiems, the C minor, at the beginning of the "Dies Irae."

SNARE-DRUM.

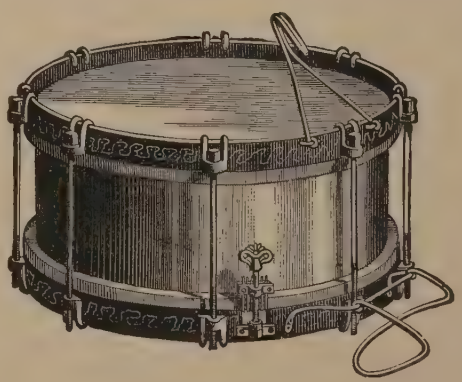
Germ., *Kleine Trommel;* Fr., *Tambour Militaire;* It., *Tamburo Militare.*

The snare-drum, side-drum or military-drum, as it is variously called, can appropriately be used in any orchestral work which gives a military picture. The instrument, which gives no definite pitch, can be used in rolls (marked "trills") or in single taps. A crescendo can be finely worked up by the addition of drum-rolls, as witness the scene of the Benediction of the Poniards in Meyerbeer's "Huguenots." Berlioz in his "Damnation of Faust," in picturing the soldiers' return to camp at evening, uses the military-drum very effectively in the tattoo. Sometimes a peculiar dull and rattling effect can be obtained from the side-drum by relaxing the cords which tighten its drum-head (Fr., *relachée;* Germ., *Schlaff gespannt*); Wagner uses this peculiar effect in his Ride of the Walkyries.

THE TRIANGLE.

Germ., *Triangel;* Fr., *Triangle;* It., *Triangolo.*

This instrument is simply a bent rod of steel suspended by a string, and struck with another tiny rod of the same metal. It has no definite tone and its blending of many "by-tones" causes each of its notes to be more or less dissonant. It



Side Drum.

is used for rhythmic effects merely, or in Gypsy music. It seldom enters a symphonic score, although Beethoven uses it in the march of the finale of his Ninth Symphony, and Schumann in

his beautiful B flat symphony adds to his picture of Spring by allowing the triangle to picture the tinkling sheep bells upon the plain. Weber has transported its Gypsy color into his opera of "Preciosa;" but Liszt, in his E flat piano concerto, has probably given the triangle its greatest prominence, for here this instrument without any pitch indulges in an *obbligato!*

Other less prominent instruments occasionally appear in scores, as the *tambourine* in Gypsy and Spanish music. Berlioz has allowed this latter instrument to enter the symphonic score in his "Harold Symphony" and in his "Roman Carnival" overture, and other instances of its use might be named. The *castagnettes*, mere clicking bits of ebony or box-wood, are also permitted to add their rhythmical effect to tropical dances. Bizet's beautiful opera of "Carmen" employs many of these last-named instruments of percussion including castagnettes and tambourines.

We have now passed in review all of the instruments which the reader will find in modern orches-

Triangle.

tras. Regarding their use in special works and the extreme to which modern orchestration has gone, we can refer the student to other articles of this volume, but it may be here stated that not all keys are as free to the orchestral composer as they are to the writer of pianoforte compositions; because of the limitations of the wind-instruments, certain keys are almost impossible in orchestral writing; those keys are best which are closely related to B flat, F, and C, and the majority of symphonies will be found in these keys and their relative minors.

Castagnettes.

We may also be permitted to sum up the tone-colors which are found upon the orchestral palette of the great composers; they can be briefly stated as follows:

Violin, — All emotions.
Viola, — Brooding melancholy and sadness.
Violoncello, — All emotions.
Contra-bass, — Ponderous, portentous, yet also grotesque and comical.
Harp, — Tinkling, bell-like; used in celestial pictures.
Flute, — Melancholy (deep register); brilliant (high register).
Piccolo, — Impish, Bacchanalian, frenzied gaiety.
Oboe, — Grief and pathos; innocence; rustic gaiety.
English Horn, — Dreamy melancholy; imitates shepherd's pipe or Alpine horn.
Bassoon, — Grotesque and comical, but earnest in deeper register.
Contra-bassoon, — Solemn and impressive.
Clarinet, — Ghost-like in deeper register; brilliant in upper.
Bass Clarinet, — Sombre.
Horns, — Romantic; used in forest scenes and hunting calls; the "stopped" tones picture evil.
Trumpets, — Martial and bold.
Trombones, — Threatening and menacing.
Bass-tuba, — Brutal and powerful.
Kettle-drums, — Explosive; anxiety and suspense.
Cymbals, — Clash of battle; festivity.
Glockenspiel, — Extreme sweetness.
Tambourine, *Triangle* } Spanish or Gypsy effects.

EVEN SONG. *Jules Wagrez.*

THE
GREAT OPERAS

THE GREAT OPERAS

THE aim of this article is not to give a complete catalogue of all operatic works, but to describe briefly those that hold the stage to-day, and that the American reader will be most apt to see and study. The oldest opera extant is Peri's "Euridice," composed in Rome in 1600; "Dafne," an earlier work, being lost. "Euridice" was written "to test the effect of the particular kind of melody" which musicians of that day "imagined to be identical with that used by the ancient Greeks and Romans throughout their dramas." This undoubtedly consisted of musical declamation rather than actual speaking. In the time of Peri, Monteverde, and other writers of their epoch, operas were given at the expense of nobles and princes, on special occasions. It was not until the year 1637 that opera began to rely upon public support, the first theater being founded then in Venice.

To Alessandro Scarlatti, who lived towards the end of the seventeenth century, is due the introduction of the Recitativo Secco (recitative with plain chord accompaniment), Recitativo Stromentato (with full accompaniment), and aria. Later, when Händel wrote in Germany and England, and Domenico Scarlatti, Porpora, and others in Italy, various classes of arias were recognized, and the music had grown to overshadow the words and disregard the dramatic meaning. The number of characters was prescribed; each performer had to have his particular vocal selections, often one of each kind in every act; and opera became a set of contrasted vocal forms, just as the suite was a group of contrasted dance forms. Along with the "Opera Seria," as this was called, there arose the "Opera Buffa," developed from the intermezzos or entr'actes, which were always in lighter vein than the chief work performed. In "Opera Buffa" the use of concerted music was first made effective, especially as a climax in finales.

In France opera had its rise from the Ballet. The works of Lulli (an Italian living in Paris from 1646 to 1687) brought French opera into prominence; and his successors imitated his style for many years. But Gluck, in the next century, became dissatisfied with the formal character of operatic music, and in 1762 wrote "Orfeo," in which he used solos and choruses at will, not discarding formal beauty, but not allowing it to interfere with dramatic expression. This and his subsequent work gave to opera much of the dignity and power that it possesses to-day. The later operas in France developed into two main classes, — Opéra-Comique, usually light and spirited, not necessarily comic, and Grand Opera, as illustrated by Gounod, Meyerbeer, and others.

In England opera developed from the Masque. The first to do important work in this line was Henry Purcell. Dr. Arne tried later to introduce the formal Italian style, but the recitatives were so criticised that they were abandoned in favor of spoken dialogue; and even Sullivan's works to-day, as those of Sir Henry Bishop in former times, show the influence of this decision.

Opera in Germany displayed no new development of the form at first. The earliest plays, in Hamburg and other cities, followed the Italian model. Händel used his own ideas somewhat, but was generally content to please by beauty of music rather than dramatic effectiveness. Even the great Mozart depended more on his own innate power to charm than on absolute dramatic unity. It was not till the time of Weber that Germany could boast an operatic style of its own. The romantic school that he founded was a distinct advance in the way of direct power and fidelity of music to words. The dramatic force of his works foreshadowed the glories of the Wagnerian music-dramas, and had an effect that must not be credited entirely to Gluck's reforms.

Modern Italian opera, though drawn for a time by Rossini's genius into the formalism of musical

display, has now submitted to the claims of dramatic unity; the later works of Verdi, to say nothing of the new Italian school of realism, show plainly that the reforms of Wagner have had influence even with those who profess to despise them. But though dramatic power has won the day, the following list will show that popular taste will not allow the beauties of the older school to be wholly ignored.

MASANIELLO, Auber.

Scene, near Naples. The plot deals with the wrongs of Fenella, a dumb girl who has been betrayed by Duke Alphonso. Her brother, Masaniello, incites the people (mostly fishermen) to revolt against the oppression of the nobles, and is made king. He spares Alphonso and his betrothed (Elvira) at instance of Fenella, from whom they have sought aid in their flight. The people are attacked by a second army; and Masaniello, after a fit of madness, is killed in the fight by his own comrades. Fenella then unites Alphonso and Elvira, and kills herself.

This work, first given in 1830, made Auber's fame in grand opera, as "Fra Diavolo" had done in opéra-comique. The music is serious throughout, full of bold effects and original harmonies. Even Wagner conceded its vigor; and its influence is felt in his first opera, "The Fairies." The plot, though somewhat diluted by conventional arias and a mad scene, is yet full of power and movement, and admits of more stirring musical treatment than Auber's other works. Among the most effective numbers are Elvira's brilliant cavatina in Act I. ("O bel Momento"), Masaniello's barcarolle and duet with his friend Pietro in Act II., the people's prayer before combat in Act III. ("Nume del Ciel"), and Masaniello's slumber song in Act IV. Fenella cannot sing, as she is mute; she is the only silent heroine in the entire operatic répertoire. Her part is that of a danseuse.

FRA DIAVOLO, Auber.

Scene, Terracina. Fra Diavolo, a bandit (said to have had an actual existence), disguises himself as a marquis and follows Lord and Lady Allcash to an inn, intent on robbery; conceals himself in the room of the innkeeper's daughter, Zerlina, and escapes by pretending an assignation there; flees to the mountains, is pursued and captured by soldiers, and acknowledges Zerlina's innocence before he dies.

The text, by Scribe, is full of humor, even horseplay at times, and gives chances for sprightly music. Lord and Lady Allcash are typical English tourists of the comic stage. The most noteworthy musical numbers are a bright medley overture, containing a very popular march, the quarrel of Lord Allcash and his wife over the disguised bandit's attentions, the effective quintet when the latter enters the inn, Zerlina's romanza telling of Fra Diavolo's life, his barcarolle sung to Lady Allcash, Zerlina's trio with the English guests while lighting them to their room, her prayer and disrobing scene, Fra Diavolo's mountain songs, a chorus of villagers who interrupt his solitude in the usual stage manner, and a strong yet natural finale.

THE BOHEMIAN GIRL, Balfe.

Scene, Austria. Arline, Count Arnheim's daughter, is rescued from a stag by Thaddeus, a Polish exile. He refuses to toast the emperor at a feast, so is driven away with a gypsy band, whose leader kidnaps Arline. Twelve years later the band returns. Thaddeus tells Arline of her rescue, and wins her love. The queen of the tribe, out of jealousy, implicates Arline in a theft. Arline, though innocent, is brought to trial before her own father. Her story of the stag reveals her identity, and she returns to her father's castle. The gypsies aid Thaddeus to enter secretly and plead his love, but the queen betrays his hiding-place. He then pleads his noble birth, and the count relents. The queen orders one of her men to shoot Thaddeus, but is herself killed by the bullet.

The interest of the plot, combined with most mellifluous music, has given this opera a permanent hold on the popular heart. Though it is not a classic work, the attractive melody, charming orchestration, and animated chorus work of this ballad-opera deserve full meed of recognition. Among its best-known numbers may be mentioned an effective prayer after Arline is stolen, Arline's dream ("I dwelt I dreamt in Marble Halls"), a quartet *a capella* on the gypsies' return, the count's lament ("Heart bowed down by Weight of Woe"), Thaddeus's song of his ancestry, and a number of lively gypsy choruses and ensembles. A very effective touch is the gypsy music dying away in the distance as the curtain falls.

MME. GADSKI AS ELIZABETH IN "TANNHÄUSER."

Copyright 1897, by Wm. Kuebler, Jr.

FIDELIO, Beethoven.

Scene, a state prison near Seville. Florestan is unjustly imprisoned by the arbitrary Don Pizarro. His wife Leonore disguises herself as a man (Fidelio), obtains service in the prison, and incidentally wins the adoration of Marcellina, the jailer's daughter, who is loved by the porter Jacquino. Don Pizarro receives word that the governor is coming next day to inspect the prison, and decides to kill Florestan. He bribes the jailer to dig a secret grave, but is overheard by Fidelio. In Florestan's dungeon (Act II.) Fidelio and the jailer dig the grave. Don Pizarro enters, orders Fidelio away, and tries to stab Florestan. Fidelio, who has remained, interposes and draws a pistol. At this moment the governor's trumpet-call is heard. The prisoners are freed, Don Pizarro led away to punishment, and Marcellina consents to marry Jacquino.

This is Beethoven's only opera, but the strength and nobility of its music make it a more worthy illustration of the German romanticism than the melodramatic incantations of Weber. In the first scene, Marcellina's misplaced love brings forth a melodious aria of hope deferred ("Die Hoffnung"), sung by Jacquino, a famous canon-quartet ("Mir ist so Wunderbar") by the jailer and the trio of lovers, and a sonorous "Gold Song," in which the jailer brings the financial question to Fidelio's attention. More noteworthy for its dramatic power is the furious aria ("Ha! Welch' ein Augenblick") sung by Pizarro when he determines upon Florestan's death; while the well-known outburst of the indignant Fidelio ("Abscheulicher") has become world-famous for the intensity of its passion. United with this dramatic soprano aria is the glorious adagio ("Komm Hoffnung"), in which she invokes the power of love. The daily airing of the prisoners gives occasion for a very effective chorus ("Ha, welche Lust"), and ends the act. Forestan opens the second act with an intensely mournful aria, though a vision of his wife brings happiness in the last few measures. He is supposed to be starving, — a condition not always well represented by the ample build of many of our operatic stars. The dramatic scenes of this act culminate in an almost frenzied duet ("O namenlose Freude") when the faithful pair are reunited, and the play ends amid general rejoicing. The spoken dialogue which occurs at times has given way to recitative in French performances. Of the four well-known overtures to this single opera, "Leonora No. 2" was really written first, then the inspiring No. 3, then No. 4, then No. 1, and "Fidelio" last of all.

NORMA, Bellini.

Scene, among the Druids in Gaul. Norma, high-priestess, is secretly married to Pollione, the Roman proconsul. But he is faithless, and falls in love with Adalgisa, a young virgin of the temple. She is ready to fly with him, but conscience impels her to confess to Norma, and both denounce Pollione. In calmer moments, each is willing to sacrifice herself to the other; but Pollione embroils the Druids by trying to tear Adalgisa from the altar, and is himself captured. Norma tries to sacrifice herself for him; he then awakens to her worth, and joins her on the funeral pyre.

The melodic charm of the opera is alone responsible for its success. Yet the unfitness of saccharine melody to portray the strong dramatic emotions of the plot must be clearly evident. This opera, like many by Rossini and Donizetti, serves rather to emphasize a few climaxes and display the singers than to illustrate the plot as a whole. Its best-known numbers are Norma's exquisite prayer ("Casta Diva"), the denunciation of Pollione, Norma's hymn calling the Druids to war, and her final duet with Pollione.

LA SOMNAMBULA, Bellini.

Scene, Switzerland. Amina, who is a sleep-walker, is loved by Elvino. When Rodolfo, the young lord of the village, returns to the inn, Lisa, the landlady, lights him to his room. Amina, in her sleep, also enters his room and stays there, dreaming she is at her wedding. The jealous Lisa denounces her to Elvino, and for a time wins his regard. Rodolfo protests Amina's innocence, but is not believed until she is seen walking in her sleep across a frail bridge over the mill-wheel.

This simple story (by Scribe) has sufficed as a subject for such melodies as Amina's aria of happiness ("Sovra il sen"), a duet in which she rebukes Elvino for jealousy, an effective chorus of the villagers (operatic villagers are a race whose occupation consists chiefly of singing praise to wine and being on hand when anything happens to the hero or heroine), and Amina's ecstatic outburst of joy ("Ah, non giunge"), the brilliant aria which ends the opera.

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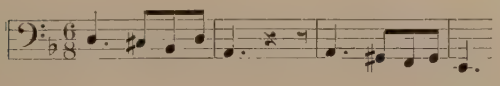
EMMA CALVÉ

In the title role of Carmen.

CARMEN, Bizet.

Scene, Seville. Don Jose, a young non-commissioned officer, and his soldiers, meet in a public square the girls from a neighboring cigar factory. The prettiest of these, Carmen, a fascinating but unscrupulous gypsy, captivates Don Jose. Michaela, an innocent village girl who loves Don Jose, brings him a message from his mother, and for a time dispels his sudden fancy. But a quarrel occurs in the factory, and Carmen is arrested for stabbing a cigar-girl. She so bewitches Don Jose that he aids her to escape from his own soldiers. In Lillas-Pastia's inn (Act II.), she meets and charms Escamillo, the bull-fighter. She dances for Don Jose, accepts him as her lover, persuades him to desert, and takes him to a band of smugglers. In their mountain haunt (Act III.), Carmen grows indifferent to Don Jose, and Escamillo arouses his jealousy. Michaela appears, and drags him away with the message that his mother is dying. In Seville (Act IV.) Carmen is stopped outside the arena by Don Jose, who tries to reawaken her love. She will not listen, she even insults him; and in a fit of rage he stabs her, just as Escamillo appears.

This fiery plot affords Bizet strong situations, effective contrasts, and many chances for local coloring. He has not merely brought forth a popular work with a few prominent numbers, but has invested the whole opera with the charm of appropriate music, so that musician and public may unite in admiration. This has earned for the opera the title of "The half-way house between Offenbach and Wagner." Among the single numbers, the resplendent "Toreador" solo seems immortalized in the popular heart. The "Habanera" and "Seguedilla" also are always sure of due appreciation. But the trained musical auditor finds greater beauties of another kind in the work; such as the dainty smugglers' quintet, the interweaving of the trumpet-recall with Carmen's dance, and the effective use of the musical phrase



as a guiding motive whenever Carmen's baleful influence asserts itself over Don Jose. There are also indications of a *motif* when Michaela appears on the scene, but the figure is not so well-defined as that of Carmen. The national music introduced (the "Habanera" being an actual Spanish tune) may serve as a reminder that Spain's influence on modern music deserves recognition. The Moors were a powerful factor in the growth of the art, introducing many instruments and possibly giving rise to the Troubadours; while the influence of Spanish dances (largely of Moorish origin) has been noted in the article on Musical Form.

MEFISTOFELE, Boïto.

Scenes as in Goethe's "Faust," from which the composer arranged the libretto. After the Prologue in Heaven, Faust and Wagner meet Mephistopheles in the Frankfort square, and Faust signs the Devil's contract in his laboratory (Act I.). The garden scene follows, with its two couples, Faust in love with Marguerite, and Mephisto captivating the duenna, as in the poem. A second scene in this act gives the Witches' Sabbath on the Brocken, including the vision of Marguerite's forsaken condition. Then follows the prison scene (Act III.), closing with Marguerite's salvation. Boïto does not end with the "Gretchen" episode, but includes the more classical beauties of the second part of "Faust." That worthy pays his court to Helen of Troy (Act IV.), then, after a quick return to his own laboratory, escapes from Mephisto (who seems unskilled in contract law), and meets death with assurance of salvation.

Of the many settings of Goethe's poem (see "Faust," in this article) this is by far the most dignified of the operas, and shows the most fidelity to the poet's ideal. While the subject is almost too large for a single opera, Boïto has arranged his libretto to include all the chief events, and has united them well by his masterly music. Especially powerful is the prologue, with its prelude and chorus, instrumental scherzo, appearance of Mephistopheles, chorus of Cherubim, and Final Psalmody. The heavenly choirs are heard from a background of clouds, with weird trumpet-peals and orchestral flourishes, and the scene ends with a finale of magnificent breadth. The bright choruses of the first act, the romantic music of the garden scene, the wild, strange incantations on the Brocken, and Marguerite's insane moanings in prison, are a few of the beauties of an opera that is not a mere set of choruses, serenades or love duets, but an art work that forms a complete whole. The smooth, melodious style of the scenes with Helen are in rather strong contrast with the previous

acts, but the return of some of the prologue music in the final temptation and salvation preserves the unity of the work.

THE SCARLET LETTER, Damrosch.

Scene, in old Boston. Plot essentially as in Hawthorne's book. Hester is brought to the pillory, but will not betray Arthur Dimmesdale, even at his own exhortation. Pearl is mentioned but once, as having died before the play begins. When Arthur is brought forth fainting from the church, Hester's anxiety betrays him to Chillingworth. The latter maliciously brings the lovers together in the woods (Act II.), where they make their decision to leave the country. On Election Day Hester returns to the city, to sail with Arthur for England (Act III.). She learns that her plans have failed, as Chillingworth is ready to sail also. Hester and Arthur then mount the scaffold together, but instead of surviving him she kills herself by poison.

Performed first in Boston, February 10, 1896, this is the first important grand opera by a resident composer on a native subject. If it has not achieved the popularity of some less ambitious works, it must still be accorded a post of importance. The music, generally in the ultra-Wagnerian style, depends little on direct melody, but relies on harmonic effects, on an orchestration that at times is too heavy for its delicate subject, and on the dramatic continuity that modern taste demands. Yet melodic charm is not lacking. Guiding motives seem to be present, but are not as numerous or as definite as those of the Wagnerian operas. The play opens with some good chorus work, and the exhortations to Hester (especially Arthur's) show direct power. The Doxology might well be included in the Pilgrim service that follows. In Act II. are a madrigal, which is one of the best numbers of the opera, but is emphatically out of place in a Puritan work, some attractive forest music, and an effective climax when Arthur and Hester decide on flight. Act III. has some really bright sailor music, some ringing Election Day numbers, a tender final duet, and a learned choral finale.

LAKMÉ, Delibes.

Scene, India. Gerald, an English officer, falls in love with Lakmé, daughter of a priest who hates foreigners. The priest compels his daughter to sing in the market-place (Act II.), and discovers and stabs her lover. She in some way manages to conceal the wounded man (Act III.) in a luxurious jungle, with all the comforts of home. She nurses him, hoping to keep his love; but the thought of his regiment, the persuasion of a fellow-officer, and other rational considerations, recall him to civilization, while Lakmé poisons herself.

This diaphanous plot gives rise to some extremely rich and sweet, though monotonous, music. A Hindoo chorus, an Oriental duet (Lakmé and slave), Gerald's love song, the priest's aria (Act II.), Lakmé's well-known bell song, Gerald's recognition of her, and her crooning slumber song (Act III.) are the most noteworthy numbers.

MME. SEMBRICH

As Lucia in Lucia di Lammermoor.

LUCIA DI LAMMERMOOR, Donizetti.

Scene, Scotland in 1669. Plot, as in Scott's "Bride of Lammermoor." Sir Henry Ashton arranges a marriage between his sister Lucy and Lord Arthur Bucklaw, for financial and political reasons. She loves Sir Edgar Ravenswood, and plights faith with him. Henry intercepts his let-

ters, and forges a paper to prove him unfaithful. She then consents to marry Arthur. As she signs the contract, Edgar appears, and explains the truth. Lucy, insane with grief, kills Arthur, and on her own recovery is overcome with horror, and dies. Edgar, awaiting Henry to fight a duel, learns of her death and kills himself.

This fierce and tragic plot has brought forth some of the most sugary melodies that ever graced the pages of Italian formalism. Among the prominent numbers are Henry's two arias, a hunting chorus, and Lucy's two arias in the first act, her duet with Henry, and the famous sextet when Edgar comes to the marriage without the slight formality of an invitation, in Act II., a mad scene in which Lucy pours forth every kind of vocal embellishment (good vocalism and insanity often go hand in hand in opera), and a tomb scene for Edgar that finishes Act III., and finishes him also. The great sextet, one of the most melodic of all ensembles, will always hold a high place in popular favor; but if opera means a drama intensified by appropriate music, and not merely a set of independent tunes, then the saccharine phrases of this mellifluous number are as much misplaced when set to its tragic words as a Watteau shepherdess would be on a Texas ranch. "*C'est magnifique, mais ce n'est pas la guerre*"; the music of Donizetti, Bellini, and even Rossini, is popular, catchy, singable, but it has often little or nothing to do with the words, and cannot be called operatic in this true sense of the term. Regarded as vocalism purely, setting aside the poetry altogether, it may be highly spoken of; and singing-teachers and vocal students will always, and justly, admire it.

MARTHA, Flotow.

Scene, Richmond. Lady Henrietta and her maid, for amusement, disguise as servants (Martha and Nancy) to visit the Richmond fair. Here they are hired by Plunkett, a farmer, and Lionel, his adopted brother, and are actually taken away to work. At the farm (Act II.) the servants are found of little use; but they attract their employers, and Lionel falls in love with Martha. The girls escape in the evening. In a court hunting-party they are recognized by their former masters. Plunkett tries in vain to seize Nancy, while Lionel deplores his hopeless love. By means of a ring Lionel is found to be a lost son of the late Earl of Derby, is given his father's former estates, and marries Henrietta.

Like the lady who objected to Shakespere, because he was made up of familiar quotations, the auditor will find that this opera consists largely of hand-organ tunes. Most familiar are the spinning quartet, the "good-night" quartet, loved by basses for its final, sustained deep note, Plunkett's song in praise of porter (Act II.), Lionel's "M'appari" as he sees Henrietta, and the concerted finale "Ah, che a voi," which starts as a tenor solo and ends as a grand ensemble. "The Last Rose of Summer" forms an important part of Act II. Bülow, criticising the rest of the opera, once called this song a "pearl on a dunghill;" yet while the play is not classical, this operatic solution of the servant-girl question has gained a firm hold on popular favor. The duet "Solo profugo" has entered the church service as "Jesus, I my cross have taken," and all of the chief numbers are familiar to almost every reader.

ORPHEUS, Gluck.

Orpheus, as in the Grecian legend, is allowed by Zeus to bring back from Hades his lost wife Euridice, provided that he will not look at her during the journey. He charms the nether world by his music, and gains the permission of its deities. At Euridice's entreaty he looks on her, and thereby loses her; but the god Amor saves the pair.

Written as a protest against the formal works of its time, this play at once enforced its lesson that operatic music should intensify the spirit of the poetry. Though Piccini afterwards wrote his "Iphigenia in Tauris" in formal vein, to offset Gluck's dramatic opera on that subject, the correctness of Gluck's reforms was clearly established by "Orpheus" in 1762. The world could not help acknowledging the dramatic force of such numbers as the sombre chorus at Euridice's tomb, the wild, threatening music of the phantoms in Hades, the pathetic beauty of Orpheus' appeal, the angry monosyllabic denial, the gradual subsidence of wrath of the Furies, the lovely Elysian choruses, and Orpheus' impassioned duet with Euridice. His world-famous outburst at her loss ("*Che faro senza Euridice*") seems somewhat calm to modern ears, and, as has been suggested, might serve as well for the *finding* of Euridice; but the opera as a whole displayed a dramatic power that has made it immortal.

From a drawing by Simeon Solomon.

FAUST, Gounod.

This opera ends with Marguerite's death, and is called "Margarethe" in Germany. Faust signs Mephisto's contract, exchanging his soul for youth (Act I.). Mephisto, after indulging in his sensational fireworks (Act II.), brings Faust to Martha's garden (Act III.), where he wins Marguerite's love, to the exclusion of her former admirer, Siebel. Her soldier brother Valentine, with his comrades, returns from foreign wars, challenges his sister's betrayer, and is treacherously killed by Mephisto. After Marguerite's prayer for mercy (in the church scene that ends Act IV.) comes the Walpurgis revel (seldom performed), and Marguerite's death in prison.

Of the many settings of this poem Schumann's cantata takes first rank, though intellectual rather than dramatic. Besides Boïto's opera, Berlioz's cantata "Damnation de Faust" deserves mention for its sensational power. Most successful among Gounod's fluent numbers are the melodious choruses of Acts I. and II., Siebel's lovely ballad ("Parlatello d'Amor"), Faust's greeting to Marguerite's dwelling ("Salve Dimora"), Marguerite's plaintive "King of Thule," and brilliant "Jewel Song," the love duets, in short, nearly every detail of the fascinating Garden Scene; also the familiar, though rather tawdry, "Soldiers' Chorus," and the grand finale trio of Faust, Mephisto, and Marguerite. The romantic tenderness of this opera more than offsets some moments of weakness, and makes it a perennial favorite.

ROMEO AND JULIET, Gounod.

Scene, Verona, as in Shakespeare's play. Romeo and Juliet fall in love at Capulet's ball (Act I.), continue in that agreeable condition during the balcony scene (Act II.), and are married by Friar Laurence (Act III.). Romeo then kills Tybalt, is banished, and says farewell to Juliet. She refuses to marry Count Paris, her father's choice (Act IV.), takes the sleeping potion from the friar, and falls insensible before the wedding. In the tomb (Act V.) Romeo finds her body and takes poison, while she stabs herself on seeing his death.

This suicidal pair of lovers are responsible for a host of musical works, symphonic as well as operatic. Gounod's opera, better than other stage settings, is not essentially great. Most popular are Juliet's waltz-arietta at the ball, Mercutio's "Queen Mab" song, the balcony scene, Friar Laurence's impressive solo ("Al vostro amor cocente"), followed by a strong trio and quartet, the parting duet of the lovers (Act IV.), and the friar's dramatic solo as Juliet takes the potion. The music, as a whole, has little continuity, and the single numbers are far below those of "Faust," but the plot suffices to hold public interest. Gounod's "Philemon and Baucis" is also sometimes given in America, and frequently in France; but the two above-mentioned operas are his chief works. "Faust" has been performed more than a *thousand times* in Paris alone, and "Romeo and Juliet" is not far behind this phenomenal record.

HÄNSEL AND GRETEL, Humperdinck.

Scene, as in Grimm's Fairy Tale. Hänsel and Gretel, after a romp over their work, are sent out by their angry stepmother to gather berries. Their father returns, and is frightened at their absence, as the wood is inhabited by a witch who bakes children into gingerbread. The children meanwhile lose themselves in the forest (Act II.), and, when overcome by weariness, say their prayers to the guardian angels, who then come to watch over them. Next morning the witch captures the two wanderers (Act III.); but they tumble her into her own oven, bake her into gingerbread, and release all the children previously enchanted.

The charming simplicity of the tale is enhanced by the most beautiful of rich Wagnerian orchestration, combined with very appealing melodies. This use of the highest musical skill to produce a combination of beauty with simplicity has given an effect not unlike that of Weber's folk-song operas, and has won universal applause. The forest scene, where the children say their prayer and fourteen angels descend from heaven to protect them, is one of ineffable beauty. But besides being of intrinsic worth, this opera proves the important point that Wagner's reforms (in continuity of melody, dramatic unity, free modulation, etc.) can, when united to direct and intelligible melodies, lead to far more pleasing results than the metaphysics of a Richard Strauss or the crude sensation of the Neo-Italian school.

PAGLIACCI, Leoncavallo.

Scene, Calabria. Tonio, the clown of a troupe of strolling players (Pagliacci), loves Nedda, the

Columbine. He overhears her planning to elope with Silvio, a villager, and in jealous rage denounces her to her husband Canio. Silvio escapes unrecognized, and Canio tries in vain to force Nedda to betray his identity. The players now perform to a village audience (Act II.) a play representing almost exactly their own situation. Columbine (Nedda) entertains her lover, while the clown (Tonio) watches for her husband (Canio). When he returns the mimic tragedy becomes real. He demands the name of her lover; she still refuses it. Nedda, seeing her real danger, calls Silvio from the audience to aid her. He rushes on the stage; but Canio stabs Nedda, then kills Silvio, crying out, "La Commedia e finita!"

This is the best of the short, fiery melodramas that have invaded the modern Italian stage. The plot is well-knit, the music coherent, intensely dramatic, and faithful to the words. Leoncavallo frankly adopts Wagner's ideas, but is not entirely successful in finding melodic phrases, as his more ambitious "Medici" will show. The tragic power of this work, however, makes it a complete success.

CAVALLERIA RUSTICANA, Mascagni.

Scene, Sicily (a square before a church). Santuzza is betrayed by Turiddu. She appeals to him; but Lola, his former love, charms him away. Santuzza reveals Lola's perfidy to Alfio, her husband, who promises to avenge both. During the festivities after church service, he picks a quarrel with Turiddu and kills him.

First of the new Italian melodramas to reach America, this work achieved immediate and universal success. Its sensational plot, quick movement, and unity of time and place are in part responsible for this; but its rich melodies have won immense favor with the public. Such selections as Turiddu's "Siciliana" (sung as part of the overture before the curtain rises), the "Regina Coeli" of the church service, Lola's "My King of Roses," and the effective "Brindisi" (to say nothing of the saccharine intermezzo) would float any opera into popularity. Yet the musician hesitates to give entire approval to the school that it represents; for betrayals and murders are not the highest of plots, nor are catchy melodies the "Ultima Thule" of our best composers. The short opera, like the short story, should not wholly supersede the worthier forms of composition. Mascagni's later works, "Amico Fritz," "I Rantzau," "Ratcliff," "Iris," and "Silvano," have not won the wide-spread fame of his first effort.

MANON, Massenet.

Scene, France. Manon, a beautiful but vain girl, on her way to a convent, meets and elopes with Des Grieux. In Paris (Act II.), the latter writes for his father's consent to his marriage with the girl, but is waylaid before posting the letter by De Bretigny, who, with the aid of Manon's cousin, wishes to win her love. He succeeds, and establishes her in luxury (Act III.); but she leaves him to rescue Des Grieux from his proposed seclusion in a convent. The reunited couple are now forced to live by gambling; but Des Grieux's father finds him and pays his debts, while Manon falls into the hands of the law, and is sentenced to exile. Des Grieux follows to rescue her; but she is utterly exhausted, and dies in his arms.

The original novel ("Manon Lescaut") by Prévost shows the many virtues of a weak character drawn down by circumstances, but the operatic plot is much more flimsy. The score contains some dainty solo work and effective concerted numbers; but despite good climaxes, this, like much of the modern French music, displays more of grace and delicacy than of real dramatic power. It lacks the vitality of young Italy, has not the melodic freshness of a Mozart, and fades away before the rugged strength of Wagner's harmonious phrases. Yet it has its peculiar charm, and those who crave sugar in their music will certainly find it in this school.

LA NAVARRAISE, Massenet.

Scene, Spain during civil war. Anita, a poor Navarraise peasant, loves Araquil, a Spanish sergeant, but his father objects to the marriage as she has no dowry. The Spanish general sets a large price on the Carlist leader's head, and in the night news comes that he has been stabbed. Anita, who has killed him, wins the reward (Act II.), but Araquil, brought in wounded from the field, thinks she has won the money by selling herself, and forswears her. He dies, and Anita goes crazy.

A late arrival among the short melodramas, this work out-Herods Herod in the way of sensation. Drums, rifles, and cannon become part of the orchestra; and if the school is continued we may soon expect to have dynamite explosions and lyddite bombs in the musical répertoire. The libretto

is stronger than the music, and the success is won chiefly by the dramatic power of the heroine.

LES HUGUENOTS, Meyerbeer.

Scene, France in 1572. Marguerite de Valois, hoping to reconcile Catholics and Protestants, arranges a marriage between Raoul de Nangis, a Huguenot, and Valentine, daughter of Count de St. Bris. But Raoul believes that Valentine loves De Nevers, and rejects her, thinking the whole project a plan to entrap him. He challenges St. Bris, who then plots his assassination. Valentine reveals the plot to Marcel, Raoul's faithful follower, and enables him to save his master. Raoul learns that he owes his life to Valentine, who loves him despite her engagement to De Nevers. But this discovery comes too late, and her marriage to De Nevers takes place. Raoul, while taking a final farewell of Valentine, overhears the plan for the St. Bartholomew massacre. After the conspirators leave, she tries to detain Raoul and save him; but honor prevails, and he departs for the combat. The play is generally ended here with the suggestion of the massacre; but in the complete opera Raoul brings warning to Marguerite at her marriage ball, then makes his way to a chapel where many Huguenots have gathered for refuge, is joined by Valentine, who brings news of De Nevers's death, is married to her by the wounded Marcel, and the trio are shot down by the soldiers of St. Bris.

Of Meyerbeer's operas, "Le Prophète," "L'Africaine," and "Robert le Diable" are sometimes performed; but the "Huguenots" is the only one given often. Owing to Wagner's attacks, it has been the fashion to abuse Meyerbeer, and even the gentle Schumann accused him of "going over to the circus." Certain parts of his music seem threadbare; but even though it does at times show blatancy and vulgarity, its bold, vigorous style and masterly orchestration have won deserved success. If the earlier acts of the "Huguenots" seem padded, despite Marcel's powerful battle-song ("Piff Paff") and the "Rataplan" of the Huguenots, yet the "Benediction of the Poignards" displays real power, and the duet of Raoul and Valentine, after the conspiracy, is one of the most dramatic scenes in the entire realm of opera. This work, in spite of its moments of artificiality, will always remain a display-opera for special vocalists, as it requires a dramatic soprano, a "coloratur" soprano, and a powerful "basso profundo," besides a "tenor robusto," and affords a climax that remains undimmed by the lapse of years.

DON GIOVANNI, Mozart.

Scene, Seville. Don Giovanni, a dissolute nobleman, tries to carry off Donna Anna, daughter of Don Pedro, the commandant, and kills her father in the resulting encounter. Donna Elvira, an earlier victim, taxes him with his cruelty, while Leporello, his servant, horrifies her with a list of his master's conquests. Don Giovanni then attempts the ruin of Zerlina, a peasant girl about to marry Masetto; but Elvira, Anna, and Don Ottavio, her betrothed, prevent this. Don Giovanni exchanges costumes with Leporello (Act II.), and lays siege to Elvira's maid. While indulging in drunken bravado at the grave of his victim he is warned of his doom by the statue of the murdered Don Pedro. Unabashed, he invites it to sup with him. The next night, at his supper, the statue enters, and bids him repent; on his refusal, he is carried off by demons.

This sparkling tale of depravity has given rise to an opera that has been called by classicists the greatest in the entire répertoire; but modern auditors will accept the verdict of Robert Franz, that its selections appear to best advantage on the concert stage. It is literally crowded with famous solos, and demands three great sopranos, a basso buffo, and a powerful baritone; this being one of the few works where the baritone usurps the tenor's post as operatic hero. Don Giovanni has a host of well-known numbers, best among them being his serenade, the drinking-song, and his duet with Zerlina. Leporello's "Catalogue Aria" always wins favor, and Zerlina's "Batti, Batti" and "Vedrai Carino" are gems of purest water. Donna Elvira and Donna Anna have powerful soprano rôles; but the opera, judged by modern standards, lacks continuity and sustained dramatic interest, though its wonderful melodies are as fresh to-day as when written, over a century ago.

THE MARRIAGE OF FIGARO, Mozart.

Scene, Spain. Count Almaviva becomes enamoured of the countess's maid, Suzanna, who is betrothed to Figaro. To punish him for his infidelity, the countess, with Suzanna's aid, uses the attentions of the amorous page, Cherubino,

MME. MELBA

As Marguerite in Faust.

who escapes from the suspicious count by jumping from a window. When the gardener's broken flower-pots betray this mode of exit, Figaro boldly proclaims himself the cavalier. To punish the count still further, Suzanna gives him an appointment, and exchanges costumes with the countess. Cherubino gets snubbed for his advances, the count pays attentions to his own disguised wife, while Figaro, in revenge, makes exaggerated declarations to the supposed countess. The unveiling brings about pardon, reconciliation, and Figaro's marriage to Suzanna.

This plot, of more delightful character than the preceding, has been set to music that is a model of grace, lightness, and beauty. It has many famous numbers, among which are Figaro's lively duet with Suzanna, his rollicking defiance to the count's schemes ("Se vuol ballare"), Cherubino's rehearsal of his well-known ballad ("Voi che sapete"), the countess's beautiful aria of regret ("Dove sono") her "Letter duet" with Suzanna, and Suzanna's entrancing invitation to the count ("Deh vieni"). But more attractive than any single selection is the exhilarating brightness of the music as a whole, and its constant fitness to the ever-shifting mazes of the dainty plot. Melodious without being monotonous, bright without being vulgar, it will ever remain one of the most exquisite and fascinating works on the operatic stage.

THE MAGIC FLUTE, Mozart.

Scene, Egypt. Sarastro, high-priest, has induced Pamina to leave her mother, the "Queen of the Night," and be trained in wisdom. The queen's attendants save Tamino, a foreign prince, from a serpent who, ignorant of the law of "Lese Majestat," was about to kill him. The queen then commands Tamino to rescue Pamina, evidently not sympathizing with the educational movement. With the present of a magic flute, and in company of the bird-catcher, Papageno, he sets out; but instead of bringing her back he is forced to become a novitiate, and goes through a severe probation, including a passage through a burning lake, and various other moving accidents by flood and field. He finally marries Pamina, despite the wiles of the wicked queen.

This trivial plot was thought to have a possible Masonic meaning, but in reality it was arranged by Schickaneder to use up some old stage properties, while Mozart wrote the music as an act of friendship. The melodies are as bright and sparkling as Mozart's other works; and of especial note are the queen's brilliant numbers, Sarastro's great bass solos, and the sprightly passages of Papageno and his wife. If the opera has succeeded, it is due to the music rather than the words; for there is not, in the entire répertoire, so disjointed and absurd a libretto.

AZARA, Paine.

Scene, Provence. Gontran, son of King Rainulf, as reward for victory over the Saracens, claims the hand of Aymar's ward, Azara, to whom the prince is secretly betrothed. Rainulf, who has himself fallen in love with Azara, and wishes Gontran to make a state marriage, denies this boon, despite a former vow. Gontran, in revenge, sets free the captured Saracen chief, Malek, and after hinting of Rainulf's past misdeeds, is disowned by his father. Aymar and Azara flee to a forest by the sea (Act II.). While Aymar, hearing of Gontran's approach, departs to seek him, Malek appears, and discovers that Azara is the lost daughter of the caliph, of whom he has been sent in search. He urges her to return with him, and pleads his love. She refuses, reminds him in vain of Gontran's generosity to him, and is rescued from enforced submission only by Gontran's appearance. Rainulf arrives, and claims the care of Azara. But Gontran shows a papal edict, excommunicating Rainulf for former crimes. The Saracens, in a sudden attack, mortally wound Rainulf, capture Azara, and sail away in triumph. A year later (Act III.) Azara, persecuted by Malek, returns to Gontran's court disguised as a troubadour, while Malek, also disguised, pursues her. At the May-day festival she sings of her own story, and reveals herself. Malek tries to stab her, is seized, then forgiven, and overcome with remorse, kills himself.

This exciting romance of chivalry (written by the composer) is set to music that abounds in harmonic beauty, local color, and dramatic force. Of sustained interest throughout, its most prominent single numbers are the victorious chorus of Gontran's retainers, Gontran's assertion of his love, Azara's lament at the troubles in store for the pair, the effective quartet of Gontran, Azara, the page Odo, and Rainulf, Malek's Oriental aria on receiving back his sword, the beautiful orchestral scene of daybreak in the forest, Azara's monologue of love, her dramatic duet-scenes with Malek

and later with Gontran, Rainulf's tragic death-song, the Saracens' taunting song of triumph from their galleys, the Moorish dances at Gontran's court, and Azara's narrative and final unveiling. While many characteristic themes are used, especially in the Oriental music, the composer has avoided the excessive use of *leit-motiven*, preferring to rely on a sense of dramatic fitness. This work, finished in 1899, is the most important American operatic production to date.

LA BOHÈME, Puccini.

Scene, Paris, as in Murger's "Vie de Bohème." The four inseparables — Marcel the painter, Colline the philosopher, Rudolph the poet, and Schaunard the musician — live, love, and work in their attic of the Latin Quarter, burning their manuscripts when fuel fails, and putting off their landlord with the utmost jovialty. Here the gentle Mimi is rescued from cold and sickness, loving and being loved by the emotional poet. In the neighboring Café Momus (Act II.), the pretty Musetta, after all her coquetry with other admirers, returns to the faithful Marcel. The inevitable quarrels (Act III.) lead to separations, lasting until the forsaken Mimi is brought back by Musetta (Act IV.), only to die in Rudolph's arms.

A well-written work, its music is full of spice and pepper, and fitly illustrates a series of *genre* pictures. If Violetta is rather shadowy, and Musetta not as bold a heroine as Carmen, the music still has many touches of infinite sweetness and graceful melody, besides the sensational style that Young Italy seems to demand. Most attractive are Rudolph's duet with Mimi (Act I.), Musetta's waltz song (Act II.), a rigaudon (Act IV.), and Rudolph's final scene with Mimi, which ends unexpectedly in spoken dialogue instead of a legitimate musical climax. Despite some moments of weakness and many chromatics, Puccini's music displays power and excellence, as well as considerable learning and skill in orchestration. He will doubtless become a leader among the set of young musicians who are striving to put new life into Italian opera, and the great Verdi himself expressed the belief that Puccini would be his successor. His "Le Villi" started the craze for short melodramas; "Edgar" won a moderate success; "Manon Lescaut" captured Italy; while "La Bohème" won the plaudits of the civilized world.

BARBER OF SEVILLE, Rossini.

Scene, Seville, as in Beaumarchais's comedy. Rosina, ward of Doctor Bartolo, who wishes to marry her, is loved by Count Almaviva, and manages to write him a note informing him that his passion is returned. The Count, aided by the factotum Figaro, gains admission to Bartolo's house, disguised as a drunken dragoon, but is arrested by the guard. He next pretends to be a music teacher, sent as substitute for Basilio, Bartolo's friend. To gain Bartolo's confidence, the disguised Count offers to make Rosina jealous of the intrusive Almaviva, and shows her letter, apparently lost through the Count's neglect. He thus obtains an interview with Rosina, and arranges the details of their elopement. But Bartolo, having seen the letter, arouses her suspicions, and she betrays the plan. At the proper time, however, Figaro and Almaviva arrive with an explanation and a notary, and the Count marries Rosina.

Displaying Rossini's wonderful melodic genius, this opera is a most attractive dramatic comedy, and its many brilliant numbers form a complete artistic whole. Best among them are the Count's serenade (Act I.), Figaro's celebrated description of his duties ("Largo al Factotum"), Bartolo's plotting aria ("La calunnia"), Rosina's chamber aria ("Una voce poco fa"), the ingenious dragoon finale of Act I., the music lesson (in which Rosina may interpolate her own selections), and the beautiful final trio of the Count, Rosina, and Figaro ("Zitti, zitti"). Written in fifteen days, the work shows the wonderful facility of the composer. It is the most exhilarating of operas; and here, for once, music and words are united with a dramatic fitness that is not often found in Rossini's works.

SEMIRAMIDE, Rossini.

Scene, Babylon. Semiramis, having murdered her royal husband King Ninus with the aid of the ambitous prince Assur, falls in love with Arsaces, who is in reality her son, and is in love with Azema. The ghost of Ninus comes out to inform the public that Arsaces will be king. Arsaces discloses himself to Semiramis, and pursues Assur to Ninus's tomb, where in the darkness Semiramis is killed and Assur captured. Thus Arsaces is left free to marry Azema and become king.

Still favored by "coloratur" sopranos for its florid arias, this relic of Babylonian criminology ap-

peals little to modern musical auditors. The most brilliant and fluent of melodies cannot cover a multitude of sins against the sense of the words. While giving fullest credit to the lyric numbers of this opera (of which the famous "Bel raggio" and the duet "Giorno d'orrore" are most effective), the trained auditor will always ask for more than meaningless melodies from a passionate queen, an ambitious schemer, or a prince avenging his murdered father.

WILLIAM TELL, Rossini.

Scene, Switzerland. Leutold, after killing an intrusive follower of the tyrant Gessler (the representative of Austria), is rescued by Tell, who thus arouses Gessler's wrath. Melchthal is put to death by the despot (Act II.), and his son Arnold, despite his love for Gessler's daughter Mathilde, joins Tell and other conspirators in an oath of vengeance. To discover the offenders, Gessler demands homage for his hat (Act III.), which he places on a pole in the public square. Tell refuses this, is forced to shoot the apple from his son's head, and is imprisoned for having a second arrow ready to shoot Gessler in case the first had killed his son. Arnold rescues him, and after Tell has slain Gessler, Arnold and Mathilde are united.

Written in a broad, serious vein, full of great orchestral touches and stirring harmonies, this is unquestionably Rossini's best work. The inspiring overture, with its thunder-storm, its "Ranz de Vaches," and trumpet call to freedom, wins universal success on the concert stage. The bright Alpine choruses, the dramatic scene of Leutold's rescue and Melchthal's arrest, a chorus of huntsmen (Act II.), Mathilde's romanza, the magnificent oath trio ("La gloria inflammi") and gathering of the Cantons, the effective archery scene, and the final hymn of freedom, are some of the many beauties in the work. The great critic, Hanslick, claims that its first two acts are among the best achievements of modern opera.

MIGNON, Thomas.

Scene, Germany and Italy, as in Goethe's "Wilhelm Meister." Mignon, stolen by gypsies, is sought by her father, Lothario, disguised as a harper. Wilhelm, a traveling student, rescues her from her hard position, and makes her his page, for which she falls in love with him. At a castle fête (Act II.) Wilhelm is fascinated by the actress, Filina. Mignon, in despair, is about to drown herself, when Lothario saves her. Thinking to aid her, the crazed Lothario sets fire to the castle, and nearly causes the death of Mignon, who is rescued by Wilhelm. Near Lothario's Italian castle (Act III.), whither he and Mignon are taken by Wilhelm, Lothario finds that Mignon is his daughter, and Wilhelm, now free from Filina's fascinations, returns Mignon's love, and marries her.

Of the modern French school, the music of "Mignon" is graceful rather than powerful. Yet its melodies are fresh and natural, and free from the too cloying richness of harmony that is often found in this school. The bright choruses of the opening scene, Mignon's charming song of her dimly remembered Italy ("Kennst du das Land"), her pathetic "Styrienne" ("Conosco un Zingarello"), Filina's dashing Polacca ("Io son Titania"), and the dainty gavotte for alto, impart a beauty to the opera that wins for it a constant success.

ERNANI, Verdi.

Scene, Spain. Elvira is betrothed to Don Gomez de Silva, is in love with the bandit Ernani (who plans to carry her off), and becomes also the object of the king's attention. Silva, learning of Ernani's affections (Act II.), wishes to kill him; but he informs the Don that the king, who has taken Elvira as hostage, is also a rival. Ernani pledges his life to Silva, promising to give it up when the latter blows his horn as signal, and both join a conspiracy against the king. The wily monarch conceals himself among the plotters (Act III.), overhears, and arrests them, but pardons them afterwards, giving Elvira to Ernani. In the midst of the happiness of their marriage festivities (Act. IV.) the jealous Silva blows his horn, and Ernani, true to his promise, kills himself.

This opera (the first recorded case where horn-playing becomes fatal to its auditor), is written in Verdi's earlier style, and shows the conventionality of the Italian stage. Banditti and mountaineers indulge in their usual occupation of singing choruses when nothing else is happening, the actors disregard one another when possible, and give their confidences entirely to the audience, the tragic events of the plot drive them to drown their sorrows in brilliant solos, until at last all the chief characters meet with some terrible fate, doubtless

in punishment for their sins against dramatic unity. The soprano invitation ("Ernani involami"; i.e., "Ernani, abduct me") is the best-known aria of this opera, thanks to the efforts of many organ-grinders.

RIGOLETTO, Verdi.

Scene, Mantua. Rigoletto has aided the duke to seduce Monterone's daughter. The courtiers, to assist in Monterone's revenge, steal Rigoletto's daughter, Gilda, and bring her to the duke, whom she loves. Rigoletto then hires an assassin, who lures the duke to his house. The assassin's sister, Magdalena, begs the handsome duke's life, and her brother consents to spare him if anyone else who can be murdered enters before the required time. Rigoletto brings Gilda to witness the duke's perfidy; but when she learns that he is to be killed, she demands admittance to save his life. The assassin stabs her, and gives Rigoletto the body, wrapped in a sack, which he opens in time to receive Gilda's last blessing.

With a gory plot, which is a good adaptation of "Le Roi s'amuse," this opera shows touches of dramatic power that raised Verdi at once above the rank of mere conventional melodists. It has many brilliant numbers, such as Rigoletto's rage against the courtiers, Gilda's love song ("Caro Nome"), and the Duke's aria to Magdalena ("La donna e mobile"); but of far greater musical worth is the quartet of Rigoletto, Gilda, the Duke, and Magdalena, which combines the most diverse emotions of love, hatred, and sorrow into a powerful ensemble that remains even to-day a model of concerted writing. This quartet was the earliest revelation of the great genius that lay hidden under Verdi's conventionality.

LA TRAVIATA, Verdi.

Scene, Paris. Founded on Dumas' "Camille," *mutato nomine*, the plot deals with the frail Violetta's real love for Alfred, who attends a gay party at her house (Act I.), their quiet life in the country (Act II.), her self-sacrificing departure from him (at his father's entreaty, during his absence), his insult to her at a Paris ball, and his remorse when he learns the truth (Act III.) and finds her dying.

This opera, full of emotional situations and vocal embellishments, will always remain a favorite with "coloratur" sopranos, though it does not possess the musical merit of Verdi's later works. Violetta's aria of awakening love ("Ah, fors' e lui"), her attempt to stifle the new passion in a series of vocal *fiorituri* that would drive almost any classical musician into wild courses, her dramatic duet with Alfred's father, the latter's famous appeal to his son's memories of home ("Di Provenza il mar"), and the passionate scenes of the last act, in which consumption itself cannot check Violetta's florid vocalism, make this opera a favorite with prima donnas, and with that class of auditors that is willing to overlook poverty of harmony, and accept melody and vocal embellishment as opera.

IL TROVATORE, Verdi.

Scene, Italy. The plot deals with the wicked wiles of the Count di Luna, a nobleman of bass voice and baser disposition. He tries to win Leonora, despite her love for Manrico, besieges the lovers in the castle of Castellar, imprisons Manrico, with the Gypsy Azucena, supposed to be his mother, and threatens the pair with death. Leonora, in despair offers her hand to the count if he will spare Manrico. The count consents, and she brings this news to the prisoner, first taking the precaution to swallow poison, and thus insure a tragic ending for the lugubrious plot. Manrico declines liberty at this price, Leonora dies, and he is executed before the eyes of Azucena, who then informs the count that Manrico was his long-lost brother! The agony does not end even here; for Azucena is sentenced to be burned at the stake, which probably happens after the audience have gone home.

The melodies of this work, though having not overmuch to do with the sense of the words, are of such thorough fluency that the opera is one of the most popular in the entire répertoire. Its eminent fitness for displaying the best methods of vocalism makes it a favorite with the singers as well as with the masses. The count's great bass aria ("Il balen"), the bright "Anvil Chorus" of the Gypsies, Manrico's spirited aria ("Di quella pira"), his tender duet with Azucena, the "Miserere," and the well-known prison scene, are not an exact reflection of the meaning of the words; yet even the classicist must acknowledge their direct melodic charm. If, as Fétis says, "Music is the art of moving the emotions by com-

binations of sounds," then "Il Trovatore" may receive its full meed of praise; for it bids fair to remain perpetually enshrined in the popular heart.

AÏDA, Verdi.

Scene, early Egypt. A secret attachment exists between the captive Aïda (daughter of the Ethiopian king) and the young warrior Rhadames. The Princess Amneris, who loves the latter, discovers this (Act II.), when Rhadames returns from war bringing Amonasro, Aïda's father, as his captive. The king releases all captives except Aïda and Amonasro, and gives Amneris as bride to the unwilling Rhadames. Aïda, at her father's suggestion (Act III.), persuades Rhadames to fly from Egypt and espouse his cause; but the jealous Amneris overhears the plot and denounces them. Rhadames is tried and condemned (Act IV.), refuses a pardon conditional on his marriage with Amneris, and is buried alive with Aïda.

This characteristic national plot (written by order of the Khedive of Egypt) was set to music of wonderful dramatic power, far beyond any of the productions of Verdi's earlier years described above. Without attempting too much local color (a mistake Delibes made in "Lakme") he has brought forth a work replete with dignity and majesty, melodious without becoming trivial, and powerful without becoming bombastic. Among its many famous numbers, which are no longer irrelevant displays of vocalism, but definite reflections of the spirit of the plot, are Rhadames' beautiful romanza ("Celeste Aïda"), the noble war chorus, Aïda's passionate lament ("Ritorna vincitor"), the stirring scene of Rhadames' victorious return, the great quintet ("Gloria al Egitto"), Aïda's lovely romanza ("O cieli azzuri"), her dramatic scene with Amonasro and Rhadames, and the strong finale, where the stage is shown in two stories, and the duet of the dying lovers mingles with the strains of the sacred dances from the hall above. "Aïda," unquestionably a great master-work, is a dramatic opera in the highest sense of the word, and has won Verdi as much fame among the cultivated musical circles of Germany and elsewhere as "Il Trovatore" did with the general public.

OTHELLO, Verdi.

Scene, Cyprus, as in Shakespere's play. The librettist, Boïto, has shown marvelous skill in arranging a libretto that charms even Shakesperians. His only important alteration has been the introduction of "Iago's creed," a powerful soliloquy that illustrates well the motiveless malignity of this character. Othello arrives in the storm (Act I.); Iago and Roderigo at once scheme for Cassio's ruin; Othello's jealousy is awakened by Iago (Act II.); Desdemona's intercession for Cassio strengthens his suspicions; Iago's continued duplicity confirms them (Act III.); and at last he smothers her (Act IV.), and kills himself on learning his mistake.

This work disputes with "Aïda," the title to being Verdi's greatest opera. In his earlier days, when he set "Macbeth," he made that schemer declaim his thoughts in conventional arias, while Macduff shouted songs of liberty with all the fervor of a modern Jingo; but in "Othello" he has abjured such meretricious methods, and has again produced a work in which a worthy plot is heightened in effect by the legitimate use of expressive and appropriate music. Verdi disclaims Wagner's influence; yet although he uses no definite *leit-motiven*, he has been forced to follow the Bayreuth lead in continuity of music, in choice of good librettos, in dramatic unity of words and music, and other important points. These make "Othello" a complete and artistic whole, instead of a set of separate vocal numbers. Its most noteworthy musical touches are the storm scene, Iago's drinking-song, the agitated quarrel scene, Iago's fierce "Credo" (Act II.), Desdemona's intercession, followed by a great dramatic quartet, Othello's outbursts of increasing wrath (Act III.), with Desdemona's gentle replies, her "Willow Song," and "Ave Maria" (Act IV.), and the great final scene of the tragedy.

FALSTAFF, Verdi.

Plot as in the "Merry Wives of Windsor." This is another example of Boïto's skill in adaptation and condensation. Shakespere's five acts are reduced to three, and the introduction of Falstaff's monologue on honor, from "Henry IV.," adds an effective touch. As in the original, Falstaff sends his love-letters to Mistress Ford and Mistress Page, is concealed in the buck-basket and thrown into the Thames (Act II.), and is roundly beaten at the masquerade at Herne's oak (Act III.), after which all is explained happily, and Nannetta is betrothed to Fenton.

Not so great as "Othello," this work still contains much beauty. Its music is refreshing and exhilarating throughout, consisting mostly of sparkling bits of dialogue, accompanied by captivating orchestration. Its best lyric numbers are the "Honor" soliloquy, a delightful female quartet *a capella* when Falstaff's letters are received, a contrasted male quartet abusing him, the ironical duet between Falstaff and Dame Quickly, Falstaff's

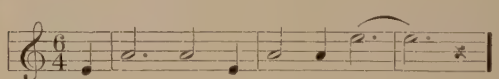
SENTA. *By G. Schachinger.*

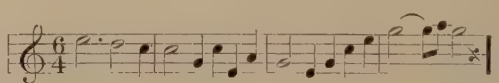
attempt to bribe Master Ford, his well-orchestrated exit in the basket, Fenton's love-song (Act III.), Nannetta's solo, and the delicate fairy music, also a final fugue that is of more contrapuntal worth than anything Verdi has written, even in the great Manzoni Requiem. "Falstaff" is Verdi's only comic opera, an earlier work written during a period of great domestic affliction having failed wholly. Though naturally in lighter vein than the two preceding tragedies, the vivacious brightness and exquisite humor of its measures have won full share of admiration.

THE FLYING DUTCHMAN, WAGNER.

DALAND, a Norwegian skipper, takes refuge from a storm. To the same harbor comes also the Flying Dutchman, doomed, because of blasphemy, to sail the seas forever unless he can find a maiden who will sacrifice her life for him. Being allowed to land once in seven years to seek her, he accompanies Daland to port, and is taken home by him. At the house (Act II.) Daland's daughter Senta, much impressed by the Dutchman's picture, tells her companions his story. When he comes himself, Senta recognizes him, falls in love with him, and at her father's wish agrees to marry him. She is ready to embark with him (Act III.), when Eric, a former admirer, tries to dissuade her. The Dutchman, thinking Senta regrets her choice, despairingly resumes his endless voyage. She declares her love for him; but he proclaims his identity to all, and sails away, not wishing to drag her into his hard fate. She plunges into the sea after him, thus saving his soul.

Not entirely representing Wagner's theories of opera, this work was still a tremendous advance over some of the inanities already catalogued. Here is no murder, adultery, or intrigue, but a well-known poetic legend of peculiar beauty. The music, always to the point in illustrating the plot, is filled with the wild power of the surging ocean, and the strong, beautiful harmonies of sailor music. Wagner's common sense in arranging his libretto results in presenting a forceful drama, moving naturally, emphasized at all points by fitting accompaniment. Best among the musical touches are the sombre phrase that accompanies the hero,



the tender motive of Senta's love,

the bright spinning song, Senta's melodious ballad of the Dutchman's story, the effective touch of the kettledrums beating softly to emphasize the silent astonishment of Senta when her hero actually appears, her great love-duet with him, the attractive sailors' choruses of the last act, and the well wrought-up finale.

TANNHÄUSER, WAGNER.

TANNHÄUSER, who has sought refuge from sorrow in the revels of Venus's subterranean court, wearies of the monotonous pleasure, regains his

EMMA EAMES

As Elsa in Lohengrin.

liberty, and joins the Minnesingers of Herrmann. At the latter's castle (Act II.) a tournament of song is held, with praise of love as the subject. Tannhäuser, who now loves and is loved by Elizabeth, shocks the assembly by vaunting unholy love, and gives a description of his life in the Venusberg. Elizabeth saves him from the just wrath of the minstrels, and he departs with the pilgrims to seek forgiveness at Rome. When the pilgrims return without him (Act III.), Elizabeth, overlooking the generous devotion of Wolfram, retires to a convent. Tannhäuser returns, with the Pope's verdict that "Sooner shall his dead staff put forth leaves than Tannhäuser be forgiven." Tannhäuser seeks to return to Venus, despite Wolfram's remonstrance; but the memory of Elizabeth restrains him. She has died in the convent, and Tannhäuser is overcome with remorse and dies near her. Meanwhile messengers arrive with the Pope's staff, which has blossomed in sign of pardon for Tannhäuser.

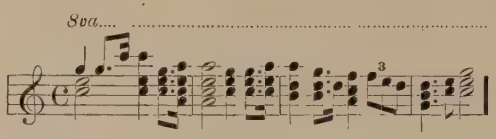
Another libretto of unusual interest for all students of the Germanic legends, this story has brought forth its full quota of powerful and appropriate music. Though its somewhat ecclesiastical plot may not appeal to as many auditors as the gorgeous scenes of the more popular (and more populous) Lohengrin, yet no musician can help being thrilled by its great overture, the noble Pilgrims' Chorus, the alluring music of the Venusberg, the great climax of Act I., where the gathering knights at last induce Tannhäuser to return, the well-known march at the singing contest, Elizabeth's greeting to the hall of the singers, her dramatic defense of Tannhäuser, her final prayer, and Wolfram's homage to the consecrated heroine.

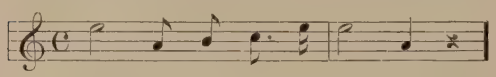
LOHENGRIN, WAGNER.

SCENE, Brabant. Elsa, daughter of the late duke, is accused by Telramund of killing her brother, Gottfried, who has in reality been bewitched by the sorceress Ortrud, Telramund's wife. The king decrees trial by combat; but at the herald's signal no champion comes, until, at the last moment, an unknown knight, in resplendent armor, appears on the river in a boat drawn by a swan. He defeats Telramund, establishes Elsa's innocence, and wins her love, but forbids her to ask his name. Elsa, pitying Ortrud's now forlorn condition (Act II.), takes her into grace, and promises to obtain Telramund's pardon. But Ortrud, ever malicious, arouses Elsa's suspicions about her nameless lover, and with renewed insolence claims precedence over her at the wedding. Ortrud's dark hints have their effect; and in the bridal chamber (Act III.), Elsa, despite her husband's entreaty, asks his name. After he kills Telramund, who breaks in to assassinate him, he grants her request, but mournfully adds that their happiness is ended. Next day, by the river, he reveals himself as Lohengrin, knight of the Holy Grail, who cannot remain on earth when known. Before leaving the forlorn Elsa, he disenchants the swan, who proves to be her lost brother Gottfried.

ARRIVAL OF LOHENGRIN. *By Th. Pixis.*

Another beautiful legend of early chivalry, this plot is set to music that is world-famous for the charm of its melody and the richness of its orchestration. Here, again, is a natural and effective drama, intensified by most marvelous music, beside which the works of a Donizetti seem like a set of trivial vocalises. Though its music was at first criticised as too complex, public taste has now reached a higher level, and can realize the beauty of the delicate prelude with its shimmering "Grail motive,"



the sweet measures of Elsa's dream, the natural, but magnificent climax of popular tumult when Lohengrin appears to deliver her, his impressive phrase of warning to her not to ask his name,

Ortrud's dramatic scene of pretended repentance, the orchestral picture of the breaking day, the pageant at the church, the harmonious prelude to Act III., and Lohengrin's passionate entreaty for Elsa's confidence. The bridal chorus is too well known for description, and is a lasting refutation to the charge that Wagner's music is devoid of melody.

TRISTAN AND ISOLDE, WAGNER.

SCENE, Cornwall. Tristan is sent to bring Isolde to be King Mark's bride. On the voyage the pair fall in love with each other. Isolde decides to take poison, but her attendant gives her a love-potion instead. After the marriage, the lovers are discovered together in the castle garden by the king (Act II.); and Tristan, severely wounded by one of the king's followers, is borne off to his native land by a faithful retainer. Isolde follows him (Act III.), is in time to witness his death, and dies herself after the arrival of the forgiving Mark.

This opera is a definite illustration of Wagner's theories, which have caused so many radical changes in modern opera. According to Wagner's formal creed, the composer should write his own libretto, and be sure to have it worthy, for the drama should be of paramount importance. The music should at all times intensify or reflect the emotion of the words, Wagner's own terse phrase, "Music is truth," best expressing this principle. The music should not break the continuity of action into separate vocal numbers, which he likened to "a string of pearls," each gem being distinct from the others; but it should form a complete dramatic whole. To produce this effect, he made use of what he termed "Melos," a continuous melodic recitative, without definite cadences to interrupt the action, and permitting free modulation to any key. He abolished ensembles, as being unnatural. To make the music still more definite in reflecting the plot, he adopted *Leit-motiven*, or guiding motives. Important personages, situations, or ideas were illustrated by some appropriate musical phrase, which then became typical of them, and was intended to recall them to the auditor's mind whenever played by the orchestra. While a detailed criticism of these methods is not in place here, it may be worth while to state that the power of Wagner's librettos and the intrinsic value of his music place him on a pedestal far above all other operatic composers, irrespective of any theory. His writings are the only operatic selections (except overtures) that have invaded the realm of pure music, and taken possession of the concert stage on their own merits, unaided by plots or soloists. This testimony of experts ought to convince the laity that if they do not enjoy Wagner it is not Wagner's fault. Yet even among the adherents of Wagner's so-called "Music of the Future" there are many conservatives who are little impressed by the white-hot passion of the too intense "Tristan," and who prefer the more melodious measures of Wagner's earlier operas. "Tristan and Isolde" is the first of Wagner's operas that fully represented all his theories.

THE MASTERSINGERS OF NUREMBURG, WAGNER.

SCENE, Nuremburg. Walther von Stolzing, a young Franconian knight, and Eva, daughter of the Goldsmith Pogner, fall in love with each other at first sight. Hearing that Eva's hand is to be the prize in a singing-contest of the Masters, Walther bravely attempts to learn their petty and formal rules, so that he may enter their guild. The tuition of the hide-bound apprentice David is of little aid; so Walther casts aside all trammels of formalism, and in his trial-song relies wholly on his innate sense of poetic beauty. The envious Beckmesser (a type of conservative stupidity and self-sufficiency) declares the trial a failure, despite the interest of Hans Sachs, who is moved by the beauty of the new style, even though he does not wholly understand it. Walther and Eva then plan an elopement (Act II.), but are prevented from carrying it out by Sachs. A ridiculous, conventional serenade by Beckmesser to Eva's maid Magdalena, whom he mistakes for her mistress, is also interrupted by Sachs, who turns it into a song rehearsal with criticism; while the minstrel comes in for a beating from the jealous David, who loves

MEETING OF WALTHER AND EVA

Act I., The Meistersinger. From original drawing by M. Fantin-Latour.

Magdalena, and the act ends in a ludicrous nocturnal riot. In Sachs's house (Act III.), Walther sings a beautiful song that has come to him in a dream, and Sachs writes it down in perfected form. Beckmesser, noticing the manuscript in Sachs's writing, tries to steal it, and is finally presented with it by Sachs. In the ensuing festival, as Sachs had foreseen, Beckmesser breaks down in its performance; and Sachs, declaring the real authorship of the song, gains Walther the coveted chance to sing it in the contest, and win Eva's hand.

The libretto, with its appealing human interest, its thorough fidelity to historical detail, and the delicious humor of its biting sarcasm against unprogressive critics, would have won plaudits for Wagner as a drama alone. But when we find, in addition, that this attractive tale of human joys, sorrows, and triumphs is given the most delicious of musical settings, there need be no hesitation in calling this Wagner's best work, if not the best opera in the entire répertoire. While it displays all the dramatic fitness of "Tristan," and contains many guiding motives, its "Melos" is not a formless mass of turgid harmony, but is literally crowded with passages of the most entrancing melodic beauty. The action of the play is not interrupted, but is intensified by such passages as the dainty apprentice music, Pogner's majestic address, Walther's trial song, the antiphonal discussion that follows it, Sachs's summer-night meditations, Beckmesser's fusty serenade, the agitated riot scene with its belated watchman, the rehearsal of the dream-song, the great quintet following it, the truly magnificent festival-scene, with its march of the guilds and dance of the apprentices, and the final triumph of virtue and progressive methods.

DAS RHEINGOLD, Wagner.

The golden treasure of the Rhine, guarded by the three Rhine Daughters, will give its possessor marvelous power, but it can only be won by a person who renounces love. The dwarf Alberich makes this sacrifice, and steals the gold. Meanwhile the Gods (Scene ii.), who have pledged the Goddess Freia to the Giants Fafner and Fasolt, in return for their having built Walhalla, are unwilling to give her up. Loge, the Fire-God, suggests the Rhine treasure as her ransom, and sets off with Wotan to steal it. The pair easily capture Alberich (Scene iii.), and deprive him of the gold, which he has fashioned into a magic ring; but he utters a curse that brings misfortune on all its future possessors (Scene iv.). The Gods then pay the Giants, and enter into their new castle, while Fafner, coveting all the treasure, kills Fasolt, who thus becomes the first victim of Alberich's curse.

This prelude to the Trilogy introduces many of its characters and a number of the guiding motives that occur in the later operas. After the wonderful river-music, consisting of wavy chord-arpeggios over a sustained bass, the Rhine Maidens, in the depths of the river, sing their graceful phrases of flowing melody, with the bright "Rhine-gold" cry. These fluent passages are disturbed by the rougher measures of Alberich, who, after a dramatic renunciation, seizes the gold and disappears. Then come the noble strains of the "Walhalla" music (Scene ii.), the ponderous tread of the Giants, and the characteristic phrases of the Gods, especially dainty being the figure illustrating Loge's magic fire. In Niffelheim (Scene iii.), amid the rhythm of the Nibelung forges, occurs the capture of Alberich; and after his declamatory curse (Scene iv.) the Gods pay their debt, and enter Walhalla over a rainbow bridge, amid music of eloquent beauty. All these strains are so well-marked and effective that they rivet themselves on the hearer's attention, and each one will thus remind him vividly of some definite character or event whenever the phrase recurs in later scenes of the Trilogy. In the hands of a lesser composer, such guiding motives might become mere musical labels, to be memorized. But Wagner, with his mastery of harmony, has given phrases so truly characteristic that they succeed in their purpose without becoming common-place. This effective use of motives results in a distinct style of opera, which Wagner called the "Music-Drama." Even in "Lohengrin" Wagner enforced dramatic unity and continuity, as Gluck had tried to do a century earlier; but now we are given an entire new method of opera. The use of continuous melodic recitative as a back-ground for *Leit-Motiven* enables the action to go on naturally, while the orchestra, by developing and interweaving the motives, can depict an actual succession of events, and even reflect the unspoken thoughts of the characters, or foretell the stage action, just as the chorus did in the old Greek tragedies. While motives become arbitrary in an over-harmonized work like "Tristan," and indefinite in the continuous sparkle of the "Meistersingers," they are eminently success-

THE RHINE DAUGHTERS.

Act I. The Rhinegold. From original drawing by M. Fantin-Latour.

ful in typifying the simple personifications of the Norse mythology.

DIE WALKÜRE, WAGNER.

Wishing to ward off attacks of the Nibelungs, Wotan has detailed the nine Valkyries, daughters of himself and Erda, to bring to Walhalla all heroes slain in battle. To evade the curse of Alberich, he has descended to earth and begotten the Volsung twins, Siegmund and Sieglinde, whose race he hopes will kill Fafner, and restore the gold to the Rhine Daughters. The twins grow up separately, enduring many hardships. At last Siegmund, storm-driven, takes refuge in the hut of Hunding, Sieglinde's husband (Act I.). The twins, not knowing each other, fall in love. Hunding returns, and at supper Siegmund's narrative proves him an enemy of Hunding's tribe. The host must shelter his guest, but bids him prepare for mortal combat on the morrow. Siegmund, alone and unarmed, gives a despairing cry for the sword his father had once promised him. Sieglinde, having drugged Hunding, shows Siegmund a sword which an unknown old man had once plunged into the ash-tree that grew through the house. Siegmund draws it from the tree, and the loving pair, recognizing each other, flee together. Fricka, Wotan's consort, protectress of the marriage vow, demands that the sinful Siegmund shall fall in the ensuing combat (Act II.). Brunnhilde, the Valkyr, knowing Wotan's love for Siegmund, strives to help the warrior in spite of Wotan's promise to Fricka, and thus incurs her father's wrath. After the Valkyries assemble (Act III.), Brunnhilde comforts the widowed Sieglinde, and begs Wotan's forgiveness. But he may not spare her; she is made mortal, and is put to sleep surrounded by a ring of magic fire through which none but a fearless hero can force his way to win her.

ROSA PAPIER
As Sieglinde in Siegfried.

The best-known numbers of this opera will always be the powerful ride of the Valkyries and the delicate Magic Fire scene at the finale — both revelations of what the modern orchestra can achieve. The second act has some effective situations, and a stirring dramatic climax; but the first act is of especial interest to Wagnerians, for here the composer's new method is used with telling effect. Instead of inappropriate arias and ensembles, there is a simple, yet natural, action on the stage, while the orchestra gives a running comment on the very thoughts of the characters, so that the musical auditor can follow the action even without the aid of the libretto. A detailed analysis cannot be given here; but such points as the introduction of the Walhalla motive in Siegmund's narrative, telling the audience that his unknown father is Wotan; the rapid alternation of motives showing the course of Siegmund's gloomy meditations when left alone unarmed; or the interweaving of the motive of Wotan's compact with the glimmering sword-music when the firelight flashes

on the sword-hilt, as yet unnoticed by the despairing Siegmund, are but a few of the many truly dramatic effects attained by the use of guiding motives.

SIEGFRIED, Wagner.

Sieglinde died in giving birth to Siegfried. He is brought up by the dwarf, Mime, Alberich's brother, and proves to be the fearless hero who alone can weld together the fragments of Siegmund's magic sword. In the forest (Act II.) Siegfried uses the sword to slay Fafner (now in the form of a dragon, guarding the stolen hoard), then kills Mime for attempting to poison him and own the treasure alone, and finally is led by a forest bird to Brunnhilde's resting-place. Opposed in his progress by Wotan (Act III.), he breaks the latter's spear, and thus the waning might of the Gods is overcome by human achievement. Siegfried pierces the fiery ring; and Brunnhilde, now more woman than goddess, yields to his love.

Containing few characters, this opera is still as intense and absorbing as the two preceding. An exchange of questions between Mime and Wotan (Act I.), not often performed, gives a recapitulation of preceding events and guiding motives. Then follows the dramatic scene of the welding of the sword. The impassioned dialogue of the finale keeps up the high standard of the music, but the undoubted gem of this opera is the Waldesweben of Act II. This one scene, in which the myriad sounds of the forest are reproduced in delicate phrases that are interwoven to form a musical texture of the richest coloring, would put to shame a whole army of conventional operatic arias.

GÖTTERDÄMMERUNG, Wagner.

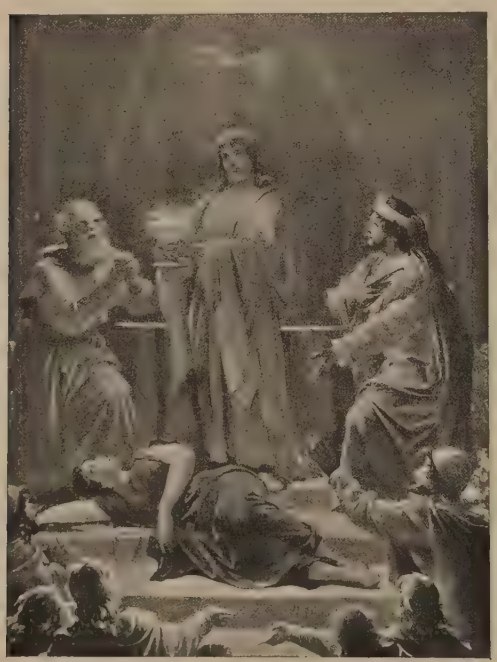
The Norns, or Fates, foretell in a prologue the approaching end of the Gods. Siegfried, leaving Brunnhilde for a time, journeys to the hall of the Gibichungs. Here (Act I.), at the instigation of the wicked Hagen, Siegfried is drugged with a love-potion. He falls in love with Gutrun, and is even persuaded to bring Brunnhilde to be Gunther's bride (Act II.). Hagen using Brunnhilde's just wrath to further his own ends, and also skillfully exciting the jealousy of Gunther, conspires to kill Siegfried. While that hero is hunting by the river (Act III.) the Rhine Daughters beg him to return the magic ring he wears (fashioned from the stolen Rhine-gold), and on his refusal they leave him to his fate. Hagen treacherously stabs him. Brunnhilde, learning of the love potion and of Siegfried's loyalty from the Rhine Daughters, immolates herself on his funeral pyre. The Rhine overflows, and the Daughters thus recover the ring, while Hagen, who has killed Gunther, is himself drowned in trying to regain the treasure. Meanwhile, in the heavens, Walhalla is seen in flames; the old Gods perish, the curse is expiated, and a new era of humanity may now arise.

Siegfried's Rhine journey, a well-wrought orchestral interlude, wins success on the concert stage.

MME. MATERNA.
As Kundry in Parsifal.

More attractive, however, is the charming appeal of the Rhine Daughters, while the impressive funeral march, telling in motives the complete story of Siegfried's life, forms a passage of marvelous power, and the majestic glory of the tragic finale is a worthy and dignified close of the grandest achievement in the annals of music. In old-style opera we should probably have the burning Brunnhilde pause midway in her suicide to sing a florid duet with Hagen, or the Rhine Maidens

come to the footlights for a grand finale ensemble, but thanks to the life and work of Richard Wagner, such nonsense is no longer tolerated. Parts of his music may be accused of excess of intensity, some of his climaxes may overstep the sublime, and verge a little toward the ridiculous; but after the fullest allowance is made for these traits, the cultivated musician must acknowledge the value of his reforms, and admit him to be the foremost of operatic composers, and one of the few great musical geniuses of the world. The four operas, Rhinegold, Die Walküre, Siegfried, and Götterdämmerung, form a single large work, the vastest operatic achievement of the world.



UNCOVERING OF THE HOLY GRAIL. *Th. Pixis.*

PARSIFAL, WAGNER.

AMFORTAS, king of the Holy Grail knights, is allured by Kundry into the magic garden of the evil magician Klingsor. Amfortas drops the holy spear, and Klingsor, grasping it, wounds him. Amfortas, lying in agony, cannot recover unless touched by the spear, which can be wrested from Klingsor only by one who is ignorant of sin, and can resist temptation. Parsifal, after beholding the Grail ceremonies and the king's suffering (Act I.) resists Kundry's charm (Act II.), regains the spear, destroys Klingsor, and thus frees Kundry from his evil power, then returns to the castle (Act III.), heals Amfortas, and is himself made king.

The first and third acts form the greatest Communion Service ever written, with which the sensuous beauty of the second act is in strong contrast. The "Good Friday" music has become a frequent number on the concert stage. The drama, too religious to be effective in the theater, is given as an opera only at Bayreuth, and has become a memorial service to the composer.

DER FREISCHÜTZ, WEBER.

SCENE, Bohemia. Kuno, retiring forester, recommends as his successor Max, his daughter Agatha's sweetheart. Kaspar, who loves Agatha, but has sold his soul to the demon Zamiel, forms a plot to escape by ruining Max. He persuades the hero to trust to Zamiel, and invites him to the demon's haunt (Act II.), where seven magic bullets are cast, — six to obey Max, the last to do Zamiel's bidding. In the official trial (Act III.) Zamiel directs the seventh shot at Agatha, but she is protected by a magic wreath of roses; the ubiquitous bullet at last kills Kaspar, and Max is free to claim his bride.

This opera, produced in 1821, shows all the beauty of the German romanticism, which relied much on the use of national legends and the appealing simplicity of folk-song. While its supernatural plot seems somewhat archaic today, the music contains many passages of unfading beauty, such as the tender prayer of Agatha, or the noble horn quartet of the overture. In the choice of subjects dear to the Teutonic heart, it is undoubtedly correct to class Humperdinck as Weber's successor rather than Wagner's. There need, however, be little discussion of a possible "Wagnerian School"; for, as already intimated, the power of Wagner's works lies largely in the individual greatness of their composer. But with modern Germany still applauding folk-song operas, and young Italy, under all its crude sensation, striving to express a note of reality and a protest against formalism, the present age need have no fear that opera is to degenerate, but may hope great things from the future.

Arthur Elson

SOME
ORCHESTRAL MASTERPIECES

SOME ORCHESTRAL MASTERPIECES

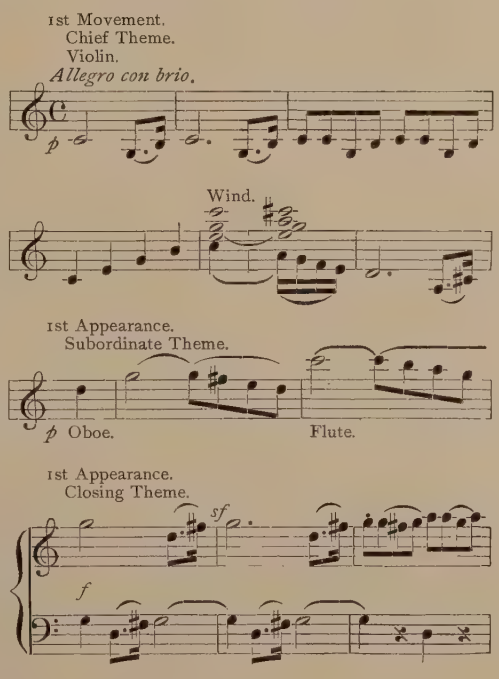
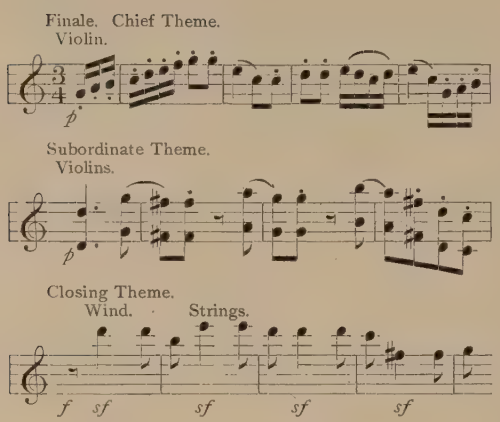
By LOUIS C. ELSON

IN presenting a series of brief analyses of orchestral masterpieces, we have aimed, not so much at compiling a complete list of all the great works in the field of symphony, overture, and symphonic poem, as to give the reader an index of certain representative works that may in some degree supplement the articles on "Musical Forms" and "The Orchestral Instruments" in this volume, and which may present a practical application of the theories therein explained. As the symphonies of Beethoven are the most accessible and the most frequently performed, we begin our list with them, adding a few musical extracts to aid the student in identifying the most important themes at the start; after a little practice he will be able to find these themes for himself without much trouble.

BEETHOVEN'S NINE SYMPHONIES.

First Symphony (Op. 21), C major, composed 1799, first performed in 1800.

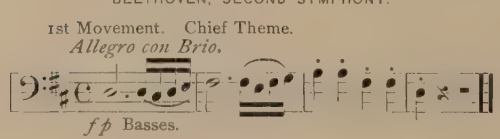
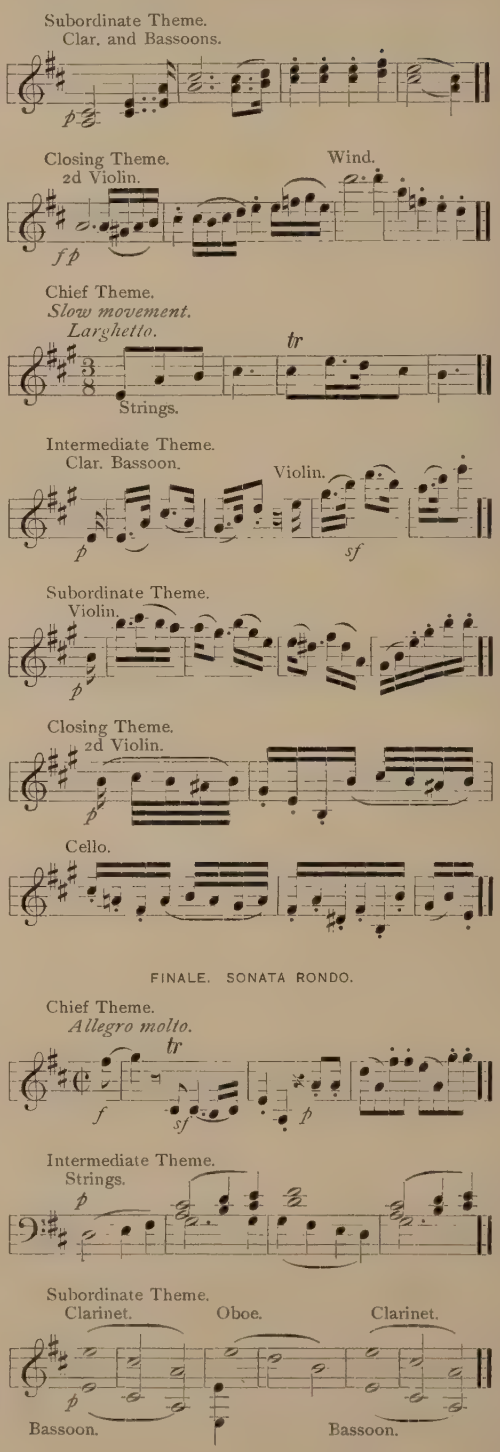
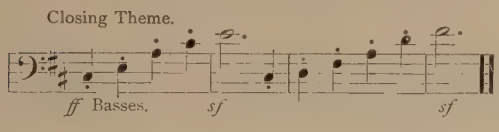
Begins with an introduction. The first two chords of this introduction aroused a storm of hostile criticism, for they indicate the key of F major while the work is in C; the progression was a gauntlet thrown down in the very first measure of Beethoven's first symphonic work. The first, second, and last movements are in sonata-allegro form, although the last has the light rondo spirit; the third movement is regular minuet form (song form with trio). The second movement — andante — has a remarkable kettle-drum *obbligato* with its closing theme, probably the first time in orchestral music that this instrument was given solo work. The third movement (minuet) is the most original part of the symphony. Haydn, the teacher of Beethoven, had riveted the minuet upon the symphony, and wrote an endless succession of these dance forms. Beethoven disliked the restricted form from the first, and this so-called minuet shows the giant tugging at his chain; it is rather a scherzo than a minuet, being as bold as many of the movements to which Beethoven gave the title of "scherzo." The finale opens with an introduction of a half-dozen measures, toying with a scale-form, which many critics found quite out of place and ludicrous, some directors even omitting it in performances of the work. The chief theme of this movement is quite in the Haydn vein, and the finale still preserves that jollity which was inherited from that earlier cycle form, — the suite. It is the weakest of the four movements.

BEETHOVEN'S FIRST SYMPHONY.

Second Symphony (Op. 36), D major.

Not yet the true Beethoven, but a great advance upon the First Symphony, written three years before it. Begins with an introduction, in which there is much dialogue between wood-wind and strings, a favorite device of the composer. First movement in sonata-allegro form. Subordinate theme contains a very bold expansion of ten measures, which puzzled many critics, but seems normal enough nowadays. Development contains much antiphonal work between wood-wind and strings.

The slow movement, *larghetto*, is the gem of the work; it is in sonata-allegro form. It has an intermediate theme before its subordinate theme. The third movement presents the first symphonic scherzo written. It is to take the place of the minuet, and presents many characteristics of that form and rhythm, but is freer and more developed. The first theme of the trio is a quaint, old-fashioned affair, scored for oboes and bassoons, as if Beethoven desired to contrast the square-cut, ultra-formal style with the freer vein which he established in the scherzo itself. This theme at its return is treated with counterpoint. The finale is a sonata-rondo, and is more resolute and powerful than the usual rollicking finales which we find in Haydn's works and in many of Mozart's symphonies; it has a long coda, a premonition of what Beethoven is to do later with this great climax of the form.

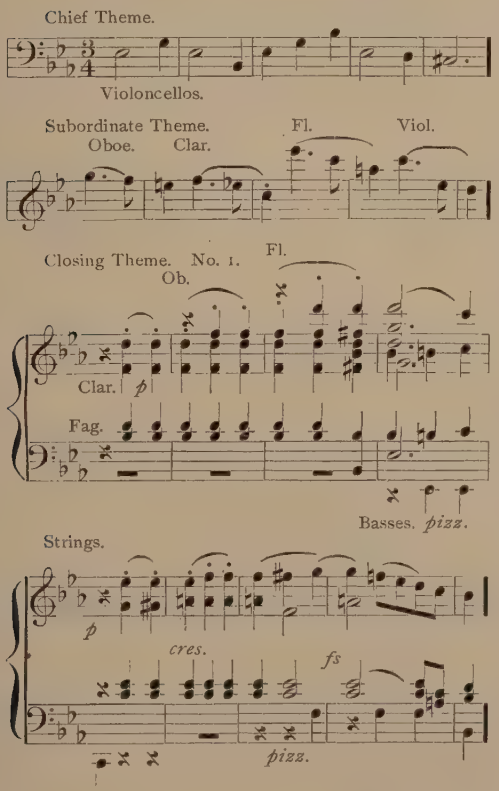
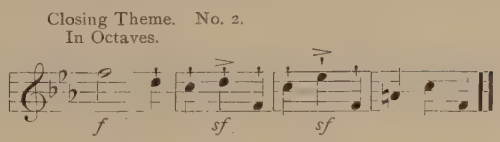
BEETHOVEN, SECOND SYMPHONY.



Third Symphony (Op. 55), "Heroic," in E flat.

The first full revelation of the grandeur of the symphonist. The greatest symphony that had ever been written at the time that it appeared, — 1804. An outcome of Beethoven's love of liberty; for it was intended to celebrate Napoleon Bonaparte, to whom, at this time, Beethoven looked as the possible liberator of humanity. There is no introduction, but two chords are used to usher in the first movement, — sonata-allegro. Two closing themes, in the regular key. Tremendous development, with crashes of battle and gusts of passion. At the end of development there is a curious combination of two dissimilar harmonies, tonic and dominant. The movement contains the first great coda in the Beethoven style, a second development, chiefly in tonic key.

THIRD SYMPHONY. FIRST MOVEMENT.



The funeral march, the second movement, was written in the anguish of disappointment which Beethoven suffered when Napoleon made himself emperor; it celebrated the burial of Beethoven's high hopes of his hero. The contrast of feminine grief, or direct pathos, given in the oboe passages, and masculine sorrow and brooding, given on the violoncello, is a striking bit of tone-coloring. The tender consolation of the Trio in C major (the March itself is in C minor) with its beautiful responses of oboe and flute, is another striking point in the work. At the return of the March we find some fugal touches (*fugato*); and the coda gives some touching sobs and sighs, ending with a wail of the full orchestra at the final cadence.

The scherzo is the first full-fledged specimen of this form, wildly rollicking and chattering in the body of the work, more gentle and tranquil in its trio. The great use made of the three horns in this trio has already been spoken of in the article on "The Orchestra."

In the finale we find the first great application of the variation-form as final movement in symphony, an attempt at a counterpoise against the strength of the sonata-allegro. The theme is taken from Beethoven's single ballet, "Prometheus." A fugato passage may be found after the full announcement of the melody; the entire movement presents as much of development as of strict variation.

Fourth Symphony (Op. 60), B flat.

A work full of unbounded freedom and caprice, awakening the adverse criticism of many composers at the time (1806), and especially arousing the ire of Weber. The short introduction affords a good opportunity to study the pizzicato effects of contrabasses and violoncellos. First movement in usual sonata-allegro form. After the subordinate theme one finds a charming canon in the octave between clarinets and bassoons, forming an intermediate theme. It may be of assistance in identifying the subordinate theme in any of these symphonies (without further musical selections), to remember that it is almost invariably scored in contrast to the chief theme, is of different character, and in the related key described in "Musical Forms"; it frequently is given largely to the

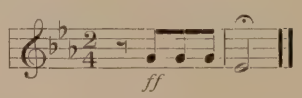
wood-wind, while the chief theme is generally given by strings or full orchestra. It should also be remembered that much of the development is derived, ordinarily, from the first figure in the chief theme. At the end of the development in this movement there is a remarkable passage for kettle-drums (B flat and F) against the strings, long-continued, and leading to the return of the chief theme and the beginning of the recapitulation. The coda is, for once, unimportant.

The adagio is considered the gem of this work. It is a short sonata-allegro form, in which the contrabasses have a rather prominent and difficult passage (a premonition of much greater difficulties to come), the bassoons are heard in important bass progressions, and the kettle-drums have a short solo at the final cadence.

The minuet is in a prolonged form, — minuet, — trio — minuet — trio — chief theme of minuet; a form which involves more repetition even than the regular song-form with trio. Beethoven applied a similar form in his Seventh Symphony and in one of his string quartets. The minuet is full of the boldest syncopations, and is fully as capricious as any scherzo. There is a charming dialogue between horns (with oboes) and the first violins, in the trio. The brusque interruption of the horns at the final cadence and the very sudden end is worth noticing, as a characteristic touch of the playful side of Beethoven.

The finale is bold, joyful, and vigorous, a rondo-form with a chief theme that is full of animal spirits. Its coda gives the contrabasses an opportunity to distinguish themselves, for never had there been such a trying passage written for them before. The saucy and dashing violin figure is here transferred to these deep instruments, and it requires the best of artists to do justice to this orchestral passage.

Fifth Symphony (Op. 67), C minor.

The first movement, sonata-allegro in form, is one of the best examples of figure treatment in the whole répertoire. In symphonies the composer often develops his themes from figures which are announced in their first measures; in this movement Beethoven not only develops his chief theme

and his closing theme from this figure, but allows it to struggle with the subordinate theme, and form the chief matter of both the development division and of the coda. One should observe the combat between the sweet subordinate theme and the rough figure given above, a device frequently used by both Beethoven and Schumann. In the development one should observe the dialogue between strings and wood-wind, an antiphonal effect long continued. In the long coda of this movement one of the most striking effects is made by inverting the figure above given, and allowing it to appear upon the horns alone; the imperative and domineering figure suddenly becomes a gentle and half-timid question. The rising sequence, also made of this figure, in rhythmic imitation, during the playing of the subordinate theme (both in exposition and recapitulation), is a charming contrast of force and gentleness.

The *andante con moto* is a rather free movement, combining both rondo and variation features. A two-division theme is given at the beginning; the viola tone-color and the contrabass pizzicato can be noted in the first eight measures; and the second division has a very piquant interpolation of a single measure, keeping one in doubt as to its tonality, followed by a brusque modulation into C major. The returning passage is full of effective modulation, after which the theme is varied by all the strings in turn, even the contrabasses presenting a variation. A free development follows, and then the chief theme (or at least its first division) returns with the full power of the orchestra, and a little canonic treatment. The coda introduces some prominent bassoon work.

The scherzo is a remarkable instance of mock-heroics, and begins with as much mystery as if the most serious of subjects were being presented. Its trio affords another instance of the virtuosity which Beethoven demanded from his contrabasses; for, as if in defiance of Weber, who had satirized his treatment of these instruments in the Fourth Symphony, he here gives them an equally difficult passage. In this symphony the scherzo leads directly into the finale; in the transition Beethoven has again allowed the kettle-drums to play an important part; they give a continuous repetition of the note C, which one is at first inclined to accept as the mediant of A flat (in which the harmony of the strings seems to be), but gradually the key of C minor is allowed to reveal itself (this dalliance with key was one of Beethoven's great delights), and we are plunged into the finale.

The finale is heavily scored, introducing piccolo, contra-bassoon, and (for the first time in symphony) trombones. The contra-bassoon simply duplicates the contrabasses. The movement is a rather free sonata-allegro, without a definite closing theme. In its development we are surprised by a beautiful reminiscence of the scherzo theme, in which the pizzicato of the strings is splendidly employed. The coda has a remarkable presentation of the subordinate theme of the movement, in diminution.

Sixth Symphony (Op. 68), "Pastoral," F major.

The first attempt to give "program-music" in symphonic form. The first movement is in the usual form, and is developed almost entirely from its opening phrase (see "Musical Forms"); it deals rather with emotions than with definite pictures, and is therefore more in the domain of pure music than the succeeding movements.

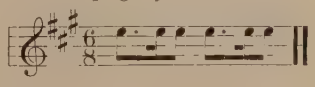
The *andante* pictures a scene by the brook, and is quite definite in its representation. There is much brilliant clarinet work in this movement; its coda attempts an imitation of nature in reproducing the calls of nightingale (flute), cuckoo (clarinet), and quail (oboe); which cannot be regarded as the highest function of music.

The scherzo pictures the "jolly gathering of the country people," and introduces a rustic dance, accompanied by a band, which is a burlesque imitation of a set of village musicians. The oboe is prominent in the ensuing music, and the bassoon passage has already been spoken of in the article on "The Orchestra."

Usually a symphony has four movements, although there are exceptions to this rule: Mozart's "Parisian Symphony," for example, has three movements, Schumann's "Cologne Symphony" five movements, and Rubinstein's "Ocean Symphony" seven movements; the "Pastoral Symphony" has five movements, the interpolated thunder-storm being the extra one. In this storm the composer shows an intimate acquaintance with nature. The hush before the storm is finely depicted in anxious and mysterious passages upon the first and second violins; the rumble of the thunder is represented by unequal groups of notes, played simultaneously by the violoncellos and contrabasses; the trombones add their clamor to the tumult when the tempest is at its height; and the rising of the wind is wonderfully depicted upon the piccolo in long notes in slowly rising progression. The storm gradually going off into the distance, a flute passage appears, like a bit of blue sky peeping through a rift in the clouds. Now follow the conventional shepherd's calls, but upon the clarinet and horn, the usual English horn not being employed in this case. The entire finale is a joyous outpouring of thanks after the tempest; and it ends with a final "jodel," or mountaineer's call, given upon the horn.

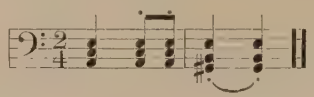
Seventh Symphony (Op. 92), A major.

One of the greatest of the nine; if one were to carefully grade the Beethoven symphonies the Third, Fifth, Seventh, and Ninth would be found the most important, and the First and Sixth the weakest of the set. The introduction to the Seventh Symphony is one of the finest examples of this division of form. Broad sweeps of scales, glimpses of charming themes, and strong rhythmic effects prepare one for the movement that is to follow. The transition to the Allegro movement is a remarkable one; the note E is tossed about from contrabasses to violins, from violins to flutes and oboes until it has appeared *sixty-nine times!* It is a noticeable fact that when Beethoven evolves some new device in a symphony he is bold enough to repeat it over and over until he gets its fullest effect; the use of the kettle-drums in the Fourth Symphony, of the contrabasses in the Fifth, of the horns in the Third, are examples. In this symphony he is determined upon presenting great organ-points (holding a single tone against moving harmonies), and the organ-point of the introduction is only a foretaste of what is to follow. The first movement is in the usual sonata-allegro form, and the rhythm of the chief theme permeates everything, the figure is in the development, in the coda, in short, in almost every part of the sprightly movement.



In the coda the horns give a great organ-point on E (the dominant note is very dominant in this movement), while the contrabasses, violoncellos, and violas unite in a variation of an organ-point — it is called a "Basso Ostinato" — on C sharp, and the rhythm above given continues to the very end.

The slow movement is here entitled *allegretto*, but Beethoven changed the tempo mark more than once; he at first marked it *andante*, but feared that mawkishness might result. It is the gem of the work, and one of the finest slow movements ever written. It is like a solemn march, but stops

short of being a funeral march; it represents brooding rather than demonstrative sorrow. Again a rhythm is pursued almost all through the movement, the following being the figure:

A dactyl and a spondee in alternation. It is a three-division form, elaborated by variation and repetition; and the second division is in consoling major contrast with the prevalent minor. The contrabass pizzicato is very effective in the major theme. An excellent *fugato* in the strings occurs at the recapitulation, and the usual effective dialogue between the string and wood-wind bands occurs in the coda.

The scherzo has a repeating form like that of the minuet of the Fourth Symphony. The horns are prominent in the trio; and at its end they give another long organ-point, on *A*, *G sharp*, *A*, a "moving organ-point" which is not unusual to-day, but which in Beethoven's time provoked much adverse comment.

The finale is a burly rondo, full of animal spirits; it ends with a most tremendous organ-point, the contrabasses and deep strings repeating *E*, *D sharp*, *E*, with a monotony that is strangely impressive.

Eighth Symphony (Op. 93), F major.

The shortest and most humorous symphony of the set. Beethoven spoke of himself, when in humorous mood, as being "aufgeknöpft," or "unbuttoned;" he surely was never more in the unbuttoned mood than in this symphony, which is jovial from first to last. Its first movement, in the usual sonata-allegro form, is founded on two genial themes and a well-contrasted closing-theme. A little figure of three notes, at the end of the

closing-theme, is developed in the boldest manner, and gives the bassoon splendid opportunities for showing its comical side. In fact, the bassoon and kettle-drums are among the most prominent instruments in this playful work.

The *allegretto scherzando*, for Beethoven has given his slow movement this unusual tempo, has a very naïve dialogue between violins and violoncellos; the movement has one of those very abrupt endings which Beethoven often took delight in.

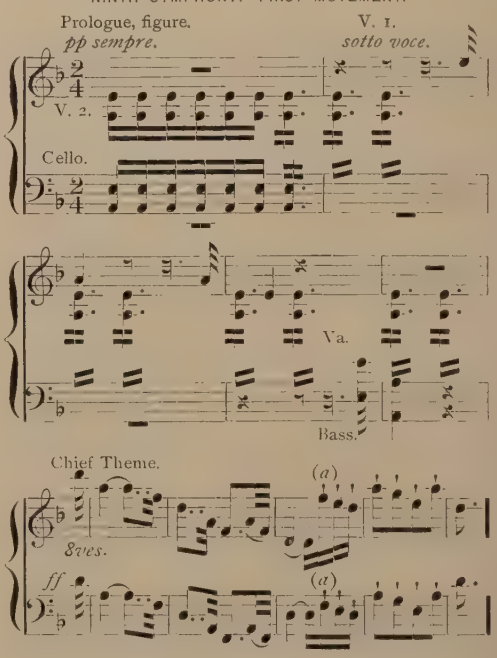
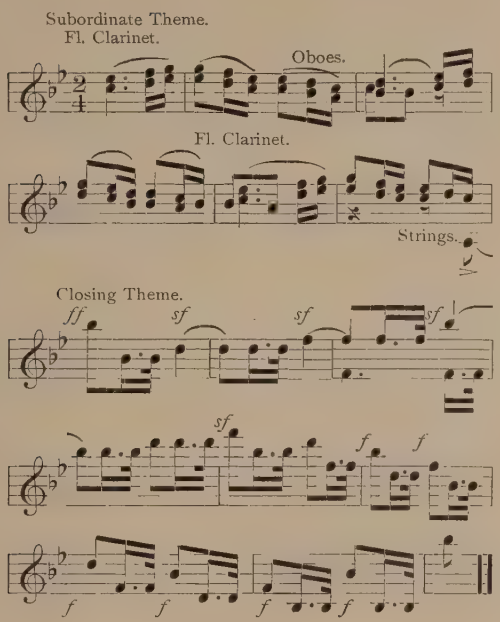
The minuet, which comes next, is the strictest minuet that the composer ever used in symphony. It is a strait-laced song-form with trio, and has been classed as a playful antique.

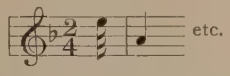
The finale plunges us into fun-making again. The figure, which is most comically treated, is a simple octave; but no description can convey the odd effect produced when the bassoon and kettle-drums sing this as a duet; nor can one adequately describe the quaint result of the flute giving the chief figure sweetly and daintily, and then having its head bitten off by the contrabasses that pounce upon it! It is all mirth and jollity from beginning to end.

The Ninth Symphony (Op. 125), the "Choral" symphony. D minor.

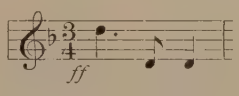
Here we have a freer form than is usual in Beethoven's symphonies, yet not altogether departing from the shape which we have studied. The first movement is a sonata-allegro with the following deviations: It has an introduction or prologue in its own tempo, which is afterwards developed through the movement. The chief theme is in D minor, but its subordinate theme is in the unusual key (considering the relationship) of B flat major; its closing theme is in the same key. There is no repeat of the exposition.

NINTH SYMPHONY. FIRST MOVEMENT.



But from this on everything is regular. The themes come back, after the development, in regular order and in the proper (tonic) key. The figure of the introduction, which leads to much development, is very simple,— only two notes.

The coda of the first movement is one of the most powerful that Beethoven ever wrote. Its bass is chromatic in character, and its mighty surges are like ocean billows. The deep strings and the bassoons carry on the ponderous figure.

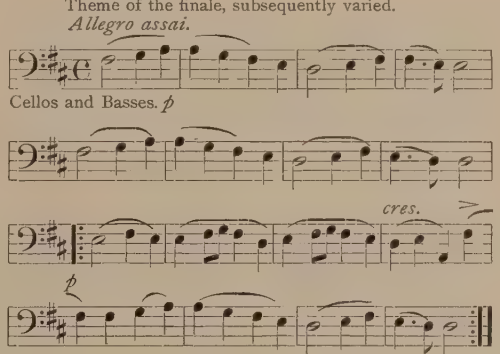
The scherzo in this symphony comes second, the only case in Beethoven's symphonies where this order is observed. It is again a rhythmic development of very simple material, its chief figure being,



and even the kettle-drums assisting in its development. The trio, for once, is not restful and *cantabile*, but of a wild, *presto* character. Its orchestration changes so rapidly and frequently that it would be impossible here to enter upon its full analysis; but the odd style of the coda, with its brusque interruptions, and its mingling of themes from trio and scherzo, may be mentioned. The *adagio*, which now follows, is a variation form upon two themes. The first theme is given at the beginning of the movement, the second at the change of tempo to *andante moderato*.

The finale has already been spoken of in the article on contra-basses in "The Orchestral Instruments," in this volume; but there is a point connected with the contra-bass passages there described that may here be added. After the dissonant cry of agony of the entire orchestra, there pass in review, one by one, the chief figures and phrases of each of the preceding movements; this was an ninovation in symphony, a summing up of the preceding material before proceeding to a final presentation of new matter. Brahms and other composers have followed this lead, and many modern symphonies present a similar epitome in their final movements. The great final movement introduces voices, both soloists and chorus; yet the form can be summed up in a word, — variation. Beethoven has given a theme to the contra-basses, and then varied it upon voices.

Theme of the finale, subsequently varied.



As he was chiefly an orchestral thinker, and cared little for the limitations of the human voice, we can sum up the result as glorious musical treatment, but rather impracticable vocal writing.

The scoring is something remarkable even for Beethoven, — the bass-drum, cymbals, triangle, contra-bassoon, trombones, etc., blending their forces with the regular orchestra. It is the most mighty symphonic climax ever conceived. That it went beyond the limits of the human larynx may be admitted; but it is none the less glorious to find the greatest symphonist building his vastest finale to his last symphony, and to observe that the wild Dionysiac joy with which it culminates was inspired by nothing less than a belief in universal love and human brotherhood.

Johannes Brahms.

BRAHMS.

JOHANNES BRAHMS may be considered the successor of Beethoven in symphonic work. He is a master of development in as high a degree as Beethoven himself, but the emotional character which we find in the symphonies of the great master is not often present in the works of his disciple, and he is by no means as great in his orchestration. The First Symphony in C minor (op. 68) is the most complicated, the most carefully developed, of the four symphonic works which Brahms has composed. Von Bülow said of it: "We have at last a Tenth Symphony." It is one of the most intricate examples of development in symphonic form; and in his finale the composer imitates Beethoven in his Ninth Symphony, and gives an epitome of the entire work. The symphony was given to the world when Brahms was forty-nine years old.

The Second Symphony in D major (op. 73) came close upon the heels of the First, but it is vastly different from its earnest predecessor; it is pastoral, cheerful, and tuneful, almost Mendelssohnian in its idyllic grace.

The Third Symphony in F major (op. 90) has been called by Richter, the great orchestral conductor, the "Heroic Symphony." There is an amount of combat and strenuousness in its measures, but its finale leads to peace and tranquillity.

In the Fourth Symphony, in E minor (op. 98), we find the same organic unity which characterizes the preceding work; but there is more of individuality, and the composer departs occasionally from the strictest form. The slow movement presents a scale not often used in modern music, a quaint mingling of major and minor. The finale displays a theme of eight measures, a "passacaglia (see "dance-forms" in article on "Musical Forms," and musical example) with a series of variations. Brahms may certainly be entitled the greatest variationist after Beethoven, and his variations of this finale are worthy to be ranked with those which Beethoven used at the end of his "Heroic Symphony."

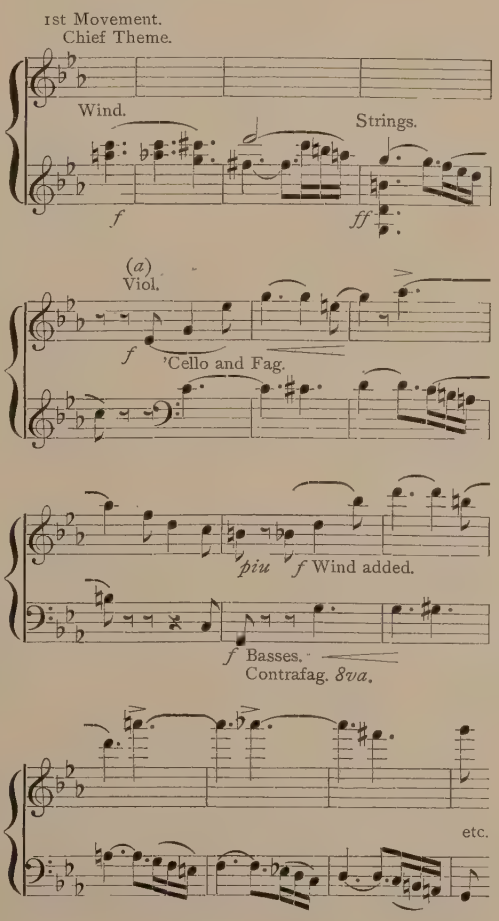
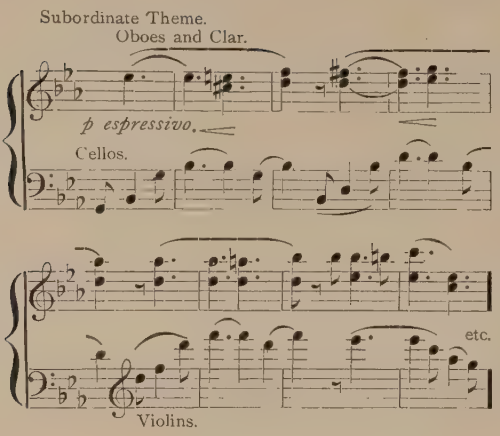
Unless the student is an adept in following the evolution of the figure, the symphonies of Brahms will remain a sealed book to him, for nowhere in music do we find such subtlety of development.

Hanslick, the eminent Viennese critic, has applied the title "Appassionata" to the First Symphony, and "Pastoral" to the second. If one is in search of adjectives the latter may be accepted, but many will doubt the fitness of the former to one of the most abstruse of symphonies.

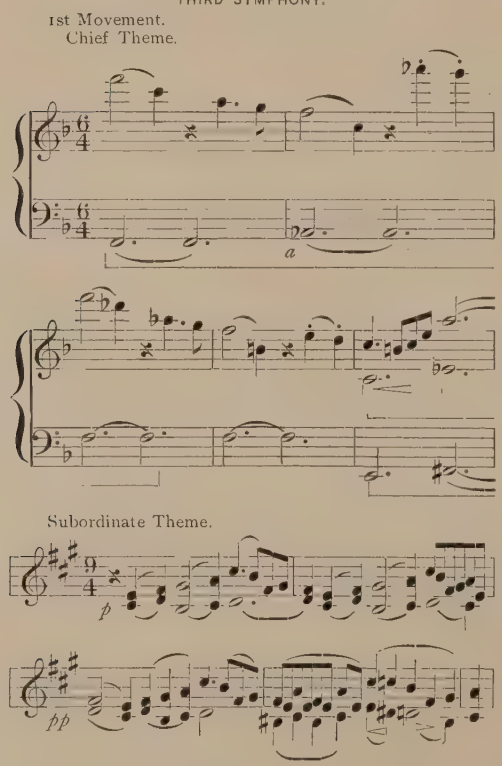
A few themes are given which show the originality of some of the material from which Brahms evolves his works.

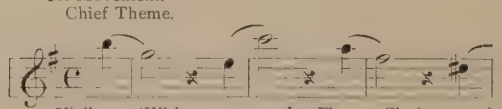
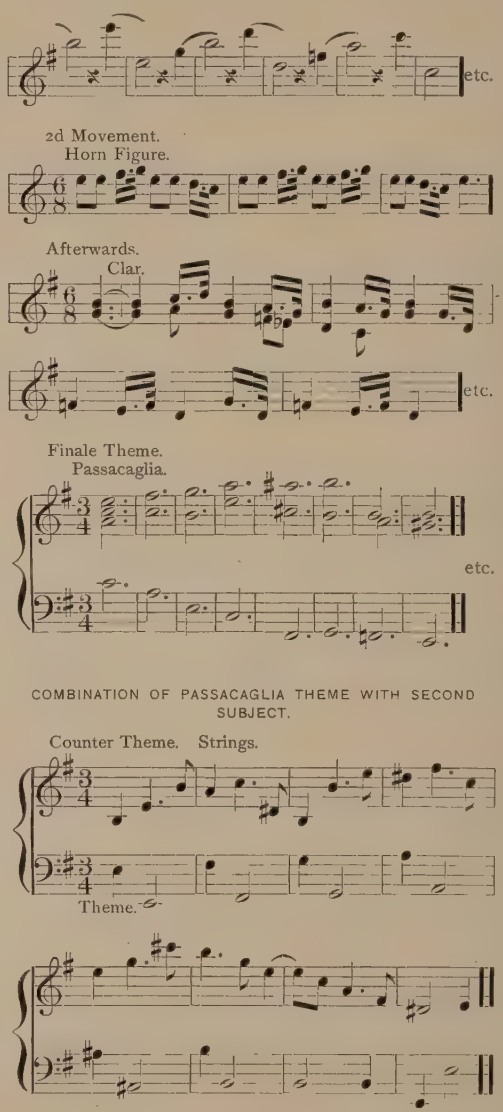
The third movement in Brahms's symphonies replaces the scherzo of Beethoven with a less playful form of intermezzo, generally of allegretto tempo. This gives an abbreviated return of its first division, after a second part which is not very different from a trio; but the playfulness of the scherzo is not demanded, nor is it present in the same degree that one finds in the scherzos of many other composers.

BRAHMS'S FIRST SYMPHONY.



THIRD SYMPHONY.



FOURTH SYMPHONY.

Violins. (With responses by Flutes, Clarinet, and Bassoons.)

COMBINATION OF PASSACAGLIA THEME WITH SECOND SUBJECT.

HAYDN.

Among Haydn's numerous symphonies (he is said to have written between 125 and 180) comparatively few have survived in the concert-room répertoire of the present day, but those that remain have a permanent place in the list. His two visits to London (see article on "Haydn" in Vol. I., of "Famous Composers," p. 245) brought forth twelve symphonies, which are known as the "Salómon Set," and the "English Symphonies." These were

written for a larger orchestra than was common in symphonic performances in the last century, and were in every way more developed than his preceding works of this form. The orchestration of all of these is simple compared with the modern works, but all of the twelve are greatly in advance of the numerous others which Haydn wrote before and after.

In the "Military" Symphony in G, we find bass-drum, cymbals, and triangle, an unusual addition to the symphonic forces of the time; in the "Surprise" Symphony, also in G, there is a heavy kettle-drum stroke in the midst of a soothing andante: the "Oxford" Symphony (also in G) is not one of the English set, although Haydn directed it in Oxford, at the organ, in return for the degree of "Doctor of Music" conferred by the University. Other special titles of Haydn's symphonies are "The Clock," the "Farewell," the "Schoolmaster," etc.

The symphonies are almost always in clear form, the first movement a sonata-allegro, the second frequently a rondo with variations, the third almost invariably a minuet with trio, and the finale generally another rondo. The undeviating jollity of the finales is a legacy from the gigue of the suite. The melodic grace is not to be underrated, and Haydn holds his place even after the advent of such symphonists as Berlioz or Strauss.

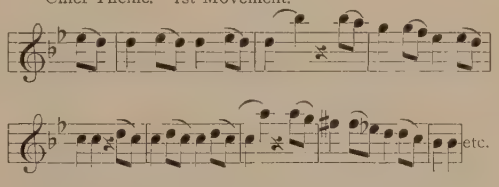
MOZART.

MOZART wrote at least forty-nine symphonies, but not all of these have survived. The greatest of this large list were the three last works of this form, composed in Vienna in 1788, three years before the composer's death. Each of these three has claims upon the student's attention. The E flat Symphony has been called the "Clarinet Symphony" from the fact that the oboe is here omitted from the orchestra in order to give more prominence to the clarinet, which appears for the first time in symphonic form. The G minor Symphony of this wonderful set of three is one of the most typical of all Mozart's symphonic works. It is the embodiment of tender pathos, of a charming melancholy, and it may be called the violet among symphonies. All composers have held this symphony in the highest esteem. Schubert says, "One can hear the angels singing in it;" Mendelssohn loved the work; and it is said that Beethoven re-scored it from a piano edition, although this score has never been discovered. The minor key of this work is by no means sombre or depressing, but expresses a naïve simplicity and tenderness that make this symphony *sui generis* among works of this character.

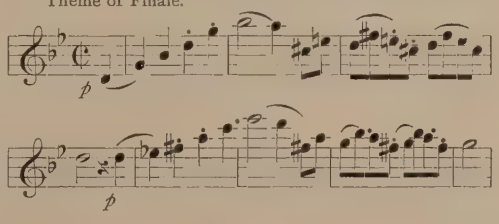
But the greatest of the three final symphonies of Mozart is the symphony in C, which has by common consent been called the "Jupiter Symphony." This certainly is the greatest symphony which was created in the last century, and there is an earnestness and a contrapuntal strength in its measures that places it far above the symphonies of Haydn and even the other symphonies of Mozart. The fugal writing of the first and last movements is one of the most ambitious points of the work. In the last movement a five-part fugue is carried on in a manner which is vastly different from the jovial and frivolous style of the finales in all other eighteenth century symphonies. It is a precursor of that development of finale which afterwards came to such fruition in the works of Beethoven.

The following two themes of the G minor symphony will illustrate the fact that the work is not doleful although in a minor key: —

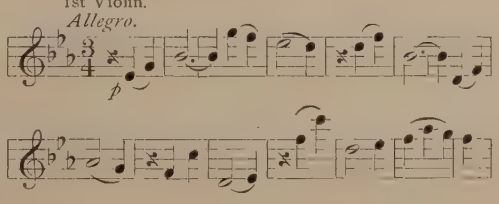
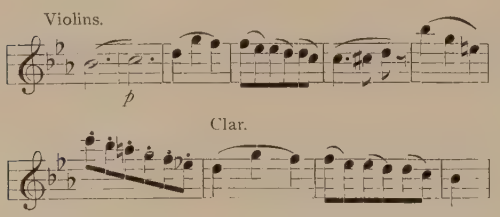
Chief Theme. 1st Movement.

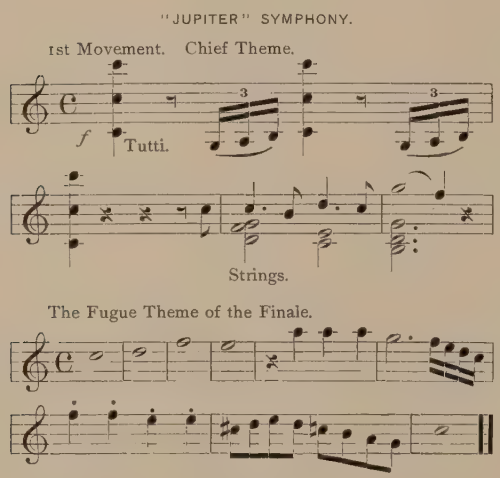


Theme of Finale.



The following is the chief theme of the E flat symphony, first movement: —

1st Movement.
1st Violin.
Allegro.

While the subordinate theme of the same work shows the first appearance of clarinets in symphonic work: —

the clarinets being accompanied by a beautiful pizzicato upon the contra-basses.

The Jupiter Symphony is made of sterner stuff, as a couple of its themes will show.

SCHUBERT.

THERE is much contention about the value of the symphonies of Schubert. Dvorák holds that Schubert's symphonies are his noblest works, while others esteem the composer's songs to be his chief claim to a permanent niche in the temple of fame. It may not be questioned that Schubert possessed an instinctive knowledge of the combinations of the orchestral instruments, and his symphonies teem with touches of orchestral color that may almost be called discoveries; but in that development of themes, that contrapuntal working out which is one of the important points of symphonic work, Schubert was defective. He himself knew this defect, and proposed to remedy it by studying counterpoint with Sechter; but he died in the same month wherein he had made arrangements with the contrapuntal teacher to take a series of lessons in this necessary art.

The very number of Schubert's symphonies is a disputed point. The world knows of nine symphonic works, but there is some evidence that a tenth was written. Several of the nine which we possess are scarcely to be classed as symphonies. Some of them were written for a little band of musicians which met each Sunday in Schubert's room in Vienna, and practiced music. Some of the works written for this coterie exist in manuscript to-day, but have been scarcely deemed worthy of the dignity of print. Of the nine symphonies existing, only two are frequently heard in the concert-room.

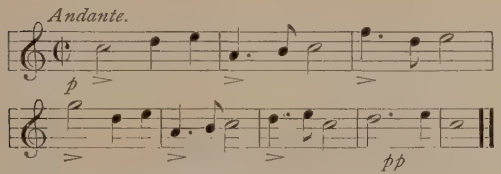
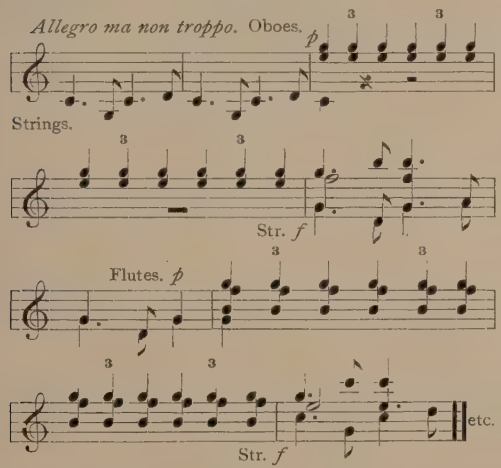
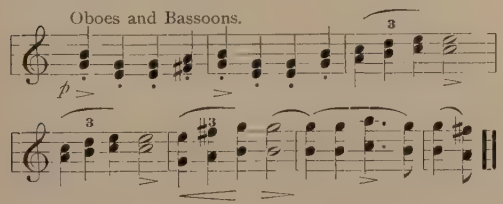
The "unfinished symphony" presents only the first two movements of the symphonic form, but these two movements indicate what a masterpiece the world might have had if the composer had completed his work.

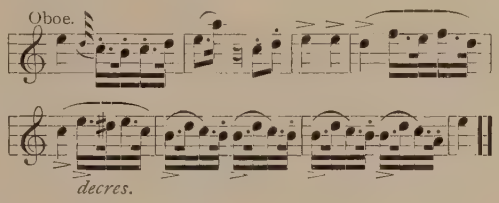
If Schubert was unable to attain the development of a Beethoven or a Brahms, he excelled these composers in the charm of his melodies, and equalled them in the wonderful effects of contrast which he was able to employ.

The greatest orchestral work which Schubert has left to the world is the symphony generally called number nine, in C major. It was written in the last year of the composer's life (in 1828), and seems to have been his "Swan-Song." The composer never had the pleasure of hearing his own work; for the society in Vienna for which it was written found it "too difficult," and shelved it. The month after his death the members of the society seemed to have taken fresh courage, and conquered the difficulties, performing the symphony on the 12th of December, 1828. After this it was nearly lost to the world, being almost forgotten when Schumann, ten years later, visited Vienna. The great German composer at once discerned the merit of the work, and sent it to Mendelssohn, in Leipsic, where it was adequately performed. From the time of this first performance, March 22, 1839, the symphony has taken a permanent place in the répertoire of the world.

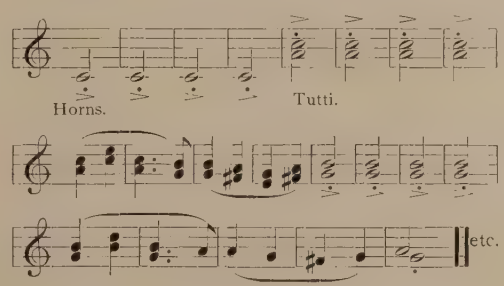
The opening of the first movement is given to the horns alone, and the romantic tone-color of these instruments never received more fitting expression. The use of the trombones in the coda of this first movement is another example of masterly power, and may be called the equal of the great trombone passages which Mozart had written

in "Don Giovanni" and in his "Requiem," — the most important trombone passage that had up to this time appeared in symphony.

The Gypsy character of the second movement, *andante con moto*, is a reminiscence of Schubert's sojourn at the castle of Prince Esterhazy at Zelesz, in Hungary, where he speedily caught up the character of the Tsigany music, and thereafter often introduced it into his instrumental works. But the symphony is worth especial detail of musical illustration: here is the horn passage which begins the work: —

which returns again at the close of the movement, but with all the force that can be given it. The chief theme of the movement is: —

The subordinate theme has a decidedly Gypsy flavor. It begins, as will be seen, in the unexpected key of E minor; but it ends in its proper key, G major; a similar exception and final return to the legitimate key is found in its reappearance after the development.

The rest of the movement will be found quite orthodox as regards its form; but the coda is especially long — and especially grand.

The Gypsy character of the second movement, already mentioned, is very marked, even in the chief theme, which runs —

The glorious contrasts of this movement are not for printed description; the *andante* is one of the imperishable gems of the musical répertoire.

The scherzo is in regular form and rhythm, but is peculiar in showing Schubert in a revising mood. Generally we come nearest to the fount of inspiration in Schubert's works, for he wrote them down just as Heaven sent them; but in this scherzo he suddenly develops the "capacity for taking pains," which has been called the chief attribute of genius. He adds sixteen measures to the score after it is completed, and these measures (beginning twenty-nine bars from the first note of the subordinate theme) are the finest part of the entire movement. The finale is wonderful in its strength and power; it leads one to believe — this final orchestral work of the composer's life — that had he remained on earth but twenty years more, he would have become the greatest composer of the century, surpassing even the giant symphonist, Beethoven!

As it is, one can see traces of Beethoven in this last great movement of the composer. There are four rhythmic strokes, — the hammer of Thor could not equal them, — which, grand as they are, remind one of Beethoven's violin concerto (first movement).

The other themes have also something of the Beethoven fury. It is small wonder that commentators have tried to saddle a "story" upon this

grand movement, but it needs no such addition. Let the auditor listen to it as "pure music," and it ought to become a stimulant to every atom of poetry and exalted thought that is within his soul.

SCHUMANN.

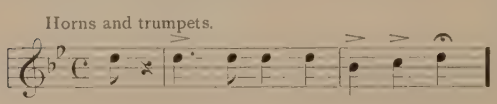
SCHUMANN'S five symphonies — for among these we may include the "Overture, Scherzo, and Finale" — are often considered as coming closest to those of Beethoven; but in the matter of form they will be found less clear and definite, although figure development is carried as far as in the immortal nine. As with all of Schumann's music, we find the symphonies to be in some degree autobiographical. The first symphony, in B flat, was written shortly after his happy marriage with Clara Wieck, and in it Schumann portrays all the happiness and joy which then came into his life. It was a peculiar fact that, while Schubert wrote his best works in stress of pain, Schumann wrote most freely and beautifully under the influence of joy. According to Hanslick, Schumann intended this first symphony in B flat to be a "Spring" symphony; and in one of his letters he says of it, "My symphony was born in an hour of ecstasy."

One finds the influence of Beethoven in all of his symphonies, although his form is so much freer than that of his model. There is a certain seriousness in all of Schumann's works which extends itself even to the scherzo movement, where one searches in vain for the rollick and joviality of the older forms.

First Symphony.

The first movement of the B flat symphony has a most passionate introduction, the first phrase of which foreshadows the chief theme of the allegro; the opening phrase is given by horns and trumpets, a call to awakening Spring. It is a singular fact that, in this phrase, Schumann made a decided error in his introduction of the horns, writing a note which could only be produced by "stopping," and which gave an ugly tone where the composer intended only beauty and romance. The phrase originally ran

but has since been altered into

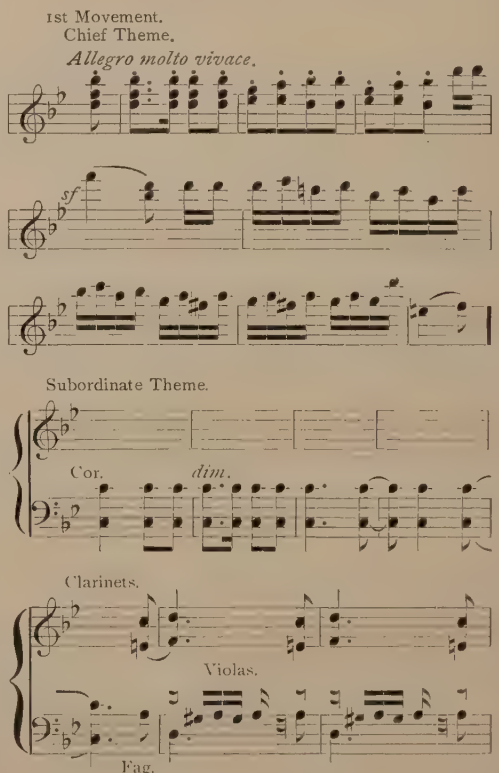
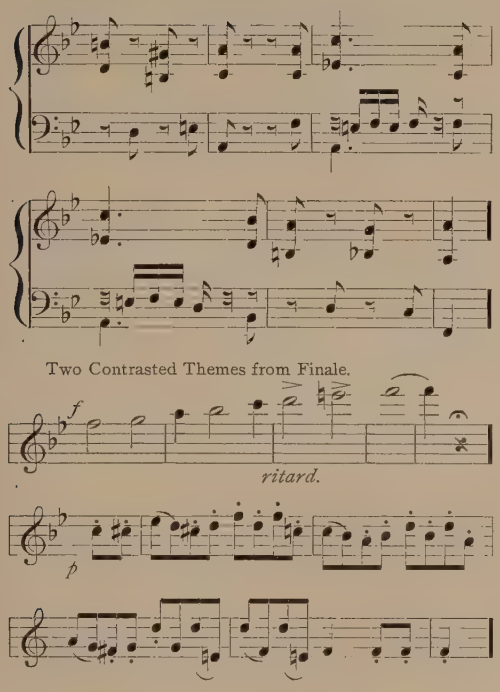


In all of Schumann's symphonies one is struck by the great amount of syncopation employed by the composer; in this respect Schumann goes even beyond Chopin.

The larghetto movement (the second) is a glorious outpouring of passion and devotion, a romantic theme being treated alternately by violin, violoncello, and finale by oboes and horns with skillful variations working gradually to a climax.

In the scherzo we find a form which Schumann derived and elaborated from a Beethoven suggestion. If the reader will refer to Beethoven's Fourth and Seventh Symphonies he will find a trio given twice in the form. With Beethoven this was the same trio each time; but Schumann avoided this repetition, and used a form with a double trio, as follows: Scherzo, first trio, scherzo, second trio, scherzo. The finale has as much of joy as Schumann ever brought into any movement: spring and love seem to have found here their most fitting idealization. We add a few of the themes for the guidance of the reader.

SCHUMANN'S B FLAT SYMPHONY.



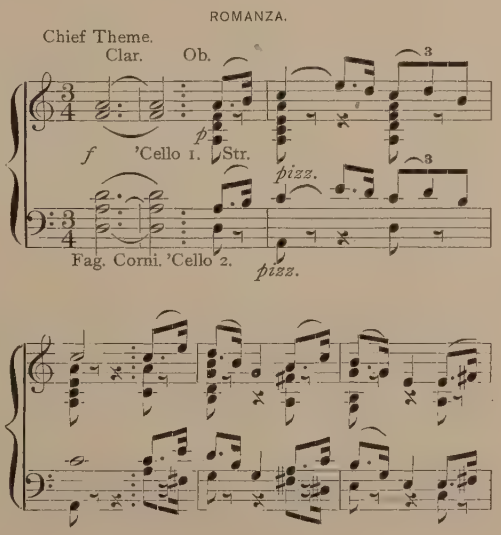
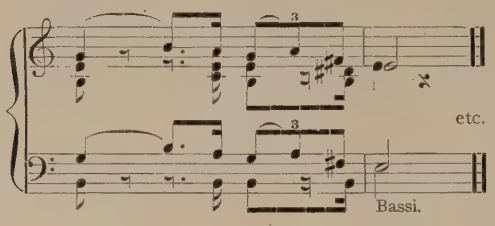
The first is an introduction to the second. The two themes will illustrate Schumann's capabilities of contrast.

The Second Symphony in C major gives another insight into the life and being of the composer. The mental malady which finally destroyed the composer was beginning to show itself, although Schumann still had the physical vigor to shake off the melancholia which tried to settle down upon him. Through all the work we find storm and stress. It is a symphony of combat, as his first symphony is one of peace; but in his finale one finds a glorious triumph depicted, which, alas, was not to be achieved in the life of the composer.

The Third Symphony, in E flat, is often called the "Rhenish" or the "Cologne" symphony. It represents almost the last period of happiness which came to the clouded life of the composer. He had been called to Düsseldorf as director of the city's music, and the joyous Rhine life appealed to his fancy greatly. All through the symphony one finds something of this chattering and joyous existence; especially wonderful in this is the interpolated fourth movement, in which Schumann depicts a great ceremony in the cathedral of Cologne, which he had witnessed some time before. This fourth movement has all the "dim, religious light" of the great edifice; and one can readily hear the peal of the organ as the archbishop is inducted into the rank of cardinal, for it was this ceremony, at which Schumann had been present, that gave rise to the music. There are five movements in this work; and directly after the solemn movement just described the finale enters, full of brightness and geniality; it is as if the people were depicted pouring out of church in holiday attire, each one chatting gaily with his neighbor, all in the most genial mood. The movement is like a rift in the clouds which began to gather over Schumann's mind, and the ray of sunshine is all the more welcome because it is very nearly the last.

The Fourth Symphony is really Schumann's second, for it was written during the period of happiness which brought forth his symphony in B flat; but the work, composed in 1841, was thoroughly revised ten years later, and became such as we know it to-day.

The romanza (second movement) is probably the gem of this symphony. It is a melodic, almost vocal theme, given out by oboes and violoncellos; the original support of this melody was a guitar, for Schumann thought to reintroduce this instrument into orchestra; but the result was not auspicious, and the composer soon saw that the tone-color of the guitar was too shallow and weak for his earnest theme, and in re-scoring we find it given to the strings, *pizzicato*. We present the beginning of this theme: —

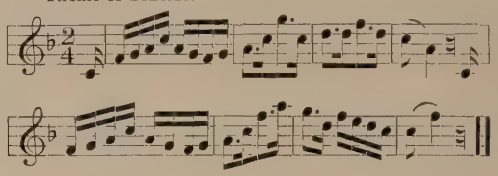


MENDELSSOHN.

This composer has left five symphonies, — if in this number we include the "Hymn of Praise," which is a cantata with a symphonic introduction, an idea possibly derived from Beethoven's Ninth Symphony, but giving greater preponderance to the vocal work.

Mendelssohn followed definitely in the footsteps of the classical composers as regards his symphonic forms. He was not in any sense a reformer, least of all an iconoclast; and the shapeliness of his works will make it unnecessary to present themes which, because of their regular relationship, the reader can readily discover for himself.

If Mendelssohn was merely a copy of Beethoven, or possibly of Mozart, in some of the movements of his symphonies, in one respect he seems to have gone beyond his predecessors; he was one of the best composers of scherzo movements that ever lived, and caught the dainty playfulness, the hearty *abandon*, of this movement as no composer had done before him. In Beethoven's scherzos we find a certain fierceness and grotesqueness, a humor tinged with bitterness, like that of Aristophanes; with Mendelssohn we find the grace and eloquent humor of a man of the world combined with the delicacy of a poet. Of his five symphonies, No. 3, the symphony in A minor, known as the "Scotch" Symphony, is probably the foremost. All of the chief German composers, from Beethoven to Franz, have endeavored to write Scottish songs. To Mendelssohn only was it given to catch the lilt and heartiness of the Scottish muse. The "Scotch" Symphony was the direct result of a visit to Scotland, although it was sketched out in Italy and finished in Germany. In almost every movement of this symphony the composer makes prominent use of the clarinets, and the dark spectral color of the *chalumeau* register is heard even in the introduction of this work. The second movement, the scherzo, is the most genial bit of scherzo music ever achieved by the German composer, and the clarinet is prominent in its chief theme.

Theme of Scherzo.

This scherzo has no trio, being rather a free rondo with almost constant development.

The adagio is scarcely as great; in its day it was held to be the most beautiful music imaginable; but repeated hearing has convinced the earnest auditor that its sadness is only a lace-handkerchief species of grief, and that its melancholy is of a genteel "song without words" order. The finale has some touches of martial ardor, but is scarcely Ossianic in its power. The coda of the work is a hymn of thanksgiving, and ends the A minor symphony in the key of A major.

Next to the "Scotch" Symphony, the "Italian" in A major is considered Mendelssohn's chief symphonic work. The andante, sometimes called "The Pilgrim's March," is probably its best number, and its theme presents some charming viola and bassoon work. (See article on Modern Scores, in this volume.) The finale, a saltarello, was probably inspired by the Roman carnival, of which Mendelssohn was a spectator.

Less important than the above two works is the "Reformation" Symphony, written in honor of the Three Hundredth Anniversary of the establishment of the Protestant confession of faith. Of this work, the first movement presents a struggle between themes representing Catholicity and Protestantism, to which is added the peculiar "amen," used in the Catholic Church at Dresden, and thus known as the "Dresden amen," also employed by Wagner as a guiding figure in "Parsifal."

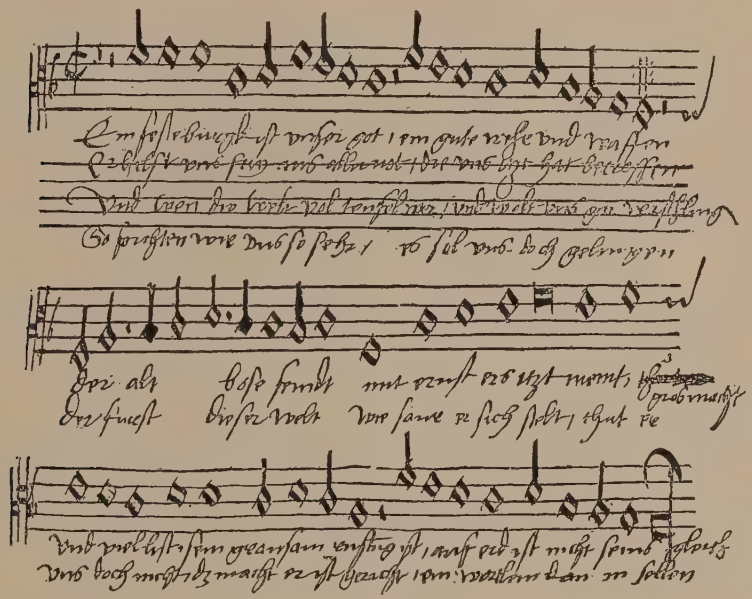
Naturally a Protestant symphony would not be complete without the typical Protestant melody, — "A Strong Castle is Our Lord."

This was practically the war-cry of the "Reformation." The Protestant sang it when he marched into battle; it was his consolation in siege and persecution; it sustained him when he walked as a martyr to the stake. One cannot, however, heartily approve of the treatment accorded this theme by Mendelssohn. He presents it at the beginning of the finale as a *flute solo*, afterwards

working it up with many variations. One cannot help imagining that this is to celebrate the triumph of Mendelssohn over contrapuntal difficulties, rather than the triumph of a religion over its persecutors. Wagner's use of the same theme in his "Emperor" march is much more suited to this topic.

BERLIOZ.

Berlioz may be considered as the most eminent tone-colorist in the domain of symphony, and he also carried program-music to a far greater extent than was dreamed of by Beethoven when he introduced this school of work in the "Pastoral" symphony. Berlioz summed up his own music by saying of it: "The dominant characteristics of my music are passion, fiery expression, and strong contrast." Of Berlioz's four symphonies, the "Symphonie Fantastique," and the "Childe Harold" symphony, are the most frequently heard; the "Romeo and Juliet" symphony, because of its vocal parts, is less often performed.



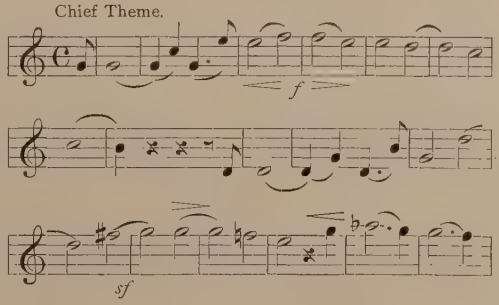
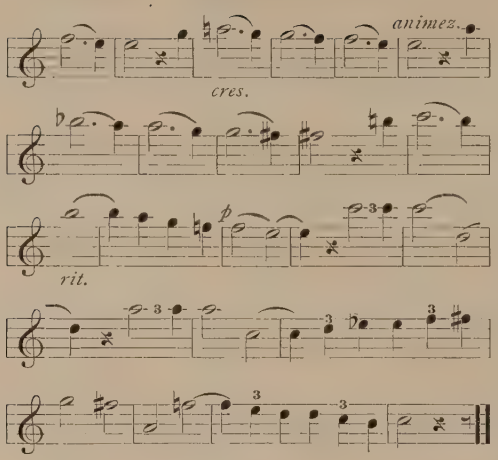
Facsimile of the oldest known manuscript of the choral "Ein' Feste Burg." 1530.

"Lelio," a supplement to the "Symphonie Fantastique," is not performed at all, and stands to the first part very much as Milton's "Paradise Regained" compares with his "Paradise Lost."

Symphonie Fantastique. This is a complete novel in tones; it presents a series of episodes in an artistic life. It expresses in its first movement a hopeless passion; and this movement can scarcely be classed as "program-music," since it deals rather with emotions than with a definite story. Just as Wagner used the guiding *motif* to give a clue to his meanings in opera, Berlioz here uses a typical melody to picture the affection of the young artist for his beloved one. As this melody forms the core of the entire work, we present it herewith:

SYMPHONIE FANTASTIQUE.

Chief Theme.



The second movement is much more definite. A ball scene presents the artist endeavoring to forget his unfortunate passion, and seeking oblivion in the whirl of society. The swingy strains of a most enticing waltz form the groundwork of the movement. It is one of the very few occasions where the waltz has been successfully introduced into symphonic form. But amid the terpsichorean strains one hears ever and anon the longing tones of the love-melody above given, telling most graphically of the futility of the attempt at forgetfulness.

The third movement is a rustic scene. In it we find the young lover seeking to calm his perturbed spirit by wandering through the fields. He hears the conversation of the simple shepherd and shepherdess. This dialogue is one of the gems of the work; the shepherdess is represented by the oboe; the shepherd by the more masculine English horn; it is a scene of tender simplicity such as Berlioz himself seldom achieved. A thunder-storm arises in the distance, the tempest comes nearer and nearer, and culminates in a terrific crash given on the kettle-drum; the storm subsides gradually, and one hears the English horn, the shepherd, calling to his beloved; the only reply is a distant murmuring of the thunder, given as a chord upon three kettle-drums; again the English horn calls sadly to the oboe; the response is once more the distant rumbling of the storm, after which the movement comes to a speedy end.

The fourth movement is a terrific picture of punishment. It is called "The March to Execution." In a fit of jealous frenzy the artist has slain his beloved, and he is now being taken to the guillotine to expiate his crime. Most wonderful are the sombre harmonies now produced; entire chords, played pizzicato upon the contra-basses express foreboding and presentiment in the most anxious manner possible; the hoarse murmurings of a bassoon duet picture the menacing crowd running by the side of the tumbril; the cymbals and bass-drum, with soft strokes, add to the portentous effect; but most realistic of all is the dissonance followed by a pause as the procession reaches the dreaded spot; a moment's silence shows us the condemned standing face to face with his doom; then the last thought in his mind is pictured upon the clarinet quite alone, — the love-theme! A terrific crash of the entire orchestra tells us that the axe has fallen, and in wild, quivering harmonies the movement rushes on to its final cadence.

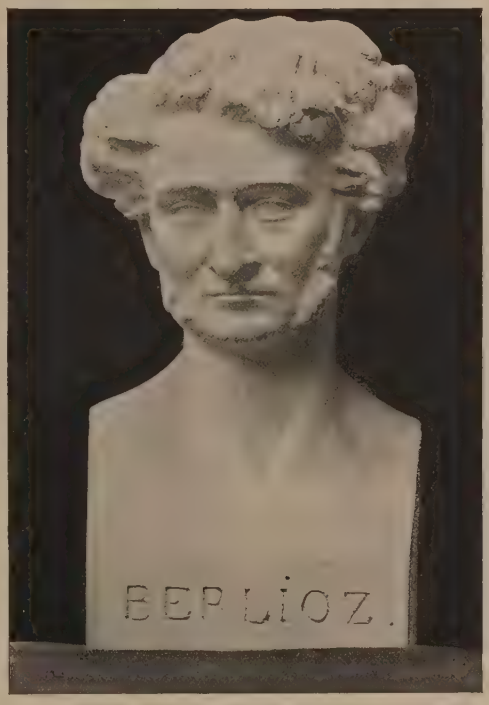
The fifth movement is one of those vivid and highly-colored finales which Berlioz took especial delight in. The soul of the murderer descends to the infernal regions, the imps welcome him with fierce rejoicing. One hears the tender love-theme, now parodied and vulgarized; even the piccolo itself was not sufficient to scream out this theme as the composer imagined it, and therefore Berlioz added an E flat clarinet (a military instrument), the only instance of its appearance in the orchestra. A parody of religious services is held by the imps, the bells ring as if summoning to church, a burlesque fugal theme satirizes the ecclesiastical music, and the wild orgie leads on to a climax of frenzy, the last note being a stroke upon the cymbal.

The entire symphony is the representation of an opium dream, unhealthy and morbid, as one might expect from the son of an opium-eater (which Berlioz was); but it possesses many moments of baleful fascination and genius, for mastery of orchestration is everywhere apparent. The full story of this symphony will be found in Vol. II. of "Famous Composers," pp. 677 and 686.

"Harold in Italy," or the "Childe Harold," symphony is a less intense and morbid subject; yet the melancholy of Byron's hero is wonderfully presented by Berlioz, who may well be called the Edgar Allan Poe of music.

We have already, in the article on "the Orchestra," alluded to the use of the viola as a personification of "Childe Harold," and have given the theme which forms the nucleus of this work; just

as the "love-theme" is omnipresent in the "Symphonie Fantastique," so the "Childe Harold" melody appears again and again amid the most varied surroundings of this composition. As with the former symphony the first movement is subjective rather than objective, picturing Childe Harold's gentle melancholy as he views the beautiful landscape of Italy. The second movement is more definite. In the "March of the Pilgrims" we find the intimation that even the solace of religion is denied to this sorrowful soul. The bell effect of harp and horn is one of the most remarkable touches of this movement. The third movement, a serenade, pictures a rustic wedding, and the effect of the *pifferári*, the Italian rustic musicians, is heard constantly, although the sorrowing of the young lover affords a charming contrast. A tambourine, and every device of peasant music, is here introduced. Amid this, as amid the chanting of the second movement, the brooding theme of "Harold" appears and re-appears.



Again we find one of the highest-spiced finales, characteristic of the composer, who here departs from the Byronic poem. It is a wild orgie of brigands on the Abruzzi Mountains, and Harold is pictured as dying amid the awful revelry. One of Berlioz's most effective contrasts occurs in this movement. For an instant the revelry ceases, and one hears the religious theme of the "March of the Pilgrims" in the distance. It is like a breath of pure air in a pest-house; but finally one hears again the "Harold theme," now broken and gasping, and finally ceasing, as if intimating the death of the hero, while the revelry goes on to a wild climax.

In the "Romeo and Juliet" symphony we find the finest single movement of any of Berlioz's orchestral works. It is a musical representation of the famous "Balcony Scene"; and again we have a personification of instruments; the tender dialogue, the interruptions of the nurse, the regretful separation, are as perfectly delineated as if enacted by persons instead of instruments. It is altogether the best musical outcome of Shakespeare's tragedy.

RAFF.

Although this composer ought by no means to be ranked with those already spoken of, yet he may form a fitting companion to Berlioz in so far that he followed the Frenchman into the domain of program-music in symphony. He had a fatal facility of composition, and *eleven* symphonies proved him to have been decidedly industrious in this field. But his works do not wear well; they have less of inspiration and more of routine workmanship than the standard symphonies. Among the eleven, the Symphony No. 3 in F major, called "Im Walde" ("In the Forest"), may be considered the most artistic; quite *à la* Berlioz, he ends this with a spectral hunt, and Frau Holle rushes her wild retinue of ghosts through the movement.

Probably the most popular of Raff's symphonies is the so-called "Lenore," a bit of program-music founded on Bürger's spectral ballad. The March of this symphony, while not of real merit, is so easily comprehended and so directly tuneful that it has been one of the most popular of symphonic selections. In the trio of this, one sees the heroine rushing along the ranks of the returning soldiery, seeking in vain for her lover who has fallen in the war. She blasphemes; and in the final movement one hears the spectre lover return, seize his bride, and gallop away. It is one of the gruesome ideas in music of which there are so many; one hears the gallop of the steed and finds a wild tonal representation of the lines

"Grau't Liebchen auch? Der Mond scheint hell,
Hurrah! die Todten reiten schnell!"

At the end a chorale is heard, suggesting that the unhappy lovers have found union in death.

It is not our intention to present a complete list of all the master-works in the symphonic field, but rather speak of such as can be of especial use to the student, or those which have some especial claim upon the reader's study. The symphonies of Dvorák, for example, are not very frequently heard in American concert rooms; yet one of them, the fifth, has a decided claim upon our attention. This is the American symphony in E minor, the work being written during the composer's sojourn in our country, and dealing in a large degree with American themes. Dvorák in this work has wisely discarded any attempt at idealizing the music of the North American Indian, whose savage strains are not more musical than the chants of the Esquimaux, or of the Australian bushmen; but he has turned towards the beautiful music of the Southern plantation, and has proved that in the negro melodies there is much material that the American composer may employ even in classical works.

Joachim Raff

Rubinstein has left six symphonies, of which the second may be considered the best. It is the famous "Ocean" symphony, whose first movement might almost be ranked with the works of greatest masters, but which in its other movements shows that inequality of composition, that alternation of inspiration and padding, which is characteristic of Rubinstein. The composer became so pleased with this work that he sought to improve it by adding to it, — a fatal fallacy. Movement after movement was written until the work in its completeness presents *seven movements*, — a concert in itself. Conductors have been wiser than the composer in this matter, and have shorn the symphony of its extraneous three movements, so that now it is generally heard in the ordinary succession of four movements.

Goldmark has written two symphonies of pleasing rather than of exciting character, the first of which, the "Rustic Wedding" symphony, is rather a suite than anything else. Goetz, the unfortunate genius who died too young, has left the world one charming little symphony in F. Cowen has written four works in this form, of which No. 3, the "Scandinavian" symphony, may be considered much the best; it is a picture of Norway, and the melancholy of that country is excellently portrayed throughout the work. The symphonies of Gade seem to have dropped from the répertoire, and are after all but a reflection of the Mendelssohnian style. Volkmann's two little symphonies are gems in their way, chaste, pure, and classical. Saint-Saëns has written most ambitious works in this field; and in his symphony in C minor has almost exceeded Berlioz in the variety of forces which he calls for, even organ and pianoforte being used together with the orchestra in this great work. Spohr, Stanford, Bruckner, and many others might be mentioned as adding to the symphonic list. Wagner's one symphony has justly been condemned to oblivion; it shrinks almost to nothing when compared with his operas. It must be remembered that it is a work of his youthful days.

TSCHAIKOWSKY.

Of the symphonies of Tschaikowsky, and especially of the weird work which, under the name of "Symphonie Pathétique," has won such criticism,

pour et contre, both in America and Europe, the reader will find many analyses. The symphonies of this composer are more frequently heard in the American concert-rooms than the orchestral works of any other Russian musician.

The most peculiar, and at the same time the most impressive, of his six symphonies is (as above intimated) his last one, the wonderful "Symphonie Pathétique," in B minor. This work was published and performed shortly before the composer's death, and it was therefore supposed that he meant the last movement, the *adagio lamentoso*, as his own requiem, a striking similarity to the circumstances surrounding the last composition of Mozart, which that composer believed to be the harbinger of his own death. Some anecdotists go so far as to state that Tschaikowsky committed suicide soon after composing this weird symphony, but the details of his last illness (he died of Asiatic cholera) entirely destroy this fanciful tale.

The work is scarcely to be considered as a strict symphony, but might rather come under the head of symphonic poems, or at most it is a symphonic fantasie in four movements. Its poetic fancy, its Slavonic brooding, its effective orchestration, and its dramatic end, make it a work of more than ordinary interest.

Especially strong in this symphony is the use of the wind instruments. The prominent use of these instruments is found in the very beginning, a most impressive introduction, wherein the bassoon carries a dirge-like theme against divided contrabasses, — a most unusual combination. The clarinets are subsequently used very strikingly, in the softest possible passages, in the second movement, *allegro con grazia;* the wood-wind instruments have also some remarkable octave work; and in the finale the trombones and bass tuba have four-part harmony in the most whispering *pianissimi*.

If one were to choose a motto for this sombre, yet brilliant, work, one would surely turn to the lines of Gray, and head the symphony, —

> "The boast of heraldry, the pomp of power,
> And all that beauty, all that wealth, e'er gave,
> Await alike the inevitable hour;
> The paths of glory lead but to the grave."

The first movement is full of turbulence and struggle, while its introduction gives an impressive picture of foreboding. The second movement is not a slow movement in a true sense, although it fills the purpose of one in the succession of movements; it is full of unrest, an effect caused in a large degree by the continuous 5—4 rhythm (the longest instance of this rhythm in the répertoire), which in this case is largely an alternation of 2—4 and 3—4. It has a remarkable pedal point given on the kettle-drum, which instrument is very prominent in the scoring, and impresses the unusual rhythm strongly upon the auditor. Just as the second movement deviates from the ideal of a slow movement, the third is not a scherzo in the conventional sense. It is a powerful picture of war and glory. The march in this has some Slavonic characteristics, and is well contrasted with a lighter theme. The finale also breaks away from traditional form, and pictures weakness and death as clearly as any music could portray these. The combat between two themes in the third movement, and the triumph of the military one, indicate human victory; in the finale the baleful tones of the muted horns (the ugliest tone-color that can be produced in the orchestra), the strange effect of the trombones and tuba in deepest register in a pianissimo quartet, the impressive pizzicato of the contrabasses, the funereal stroke of the gong, and the gradually dying pulsations of tone that end the movement, give a strong picture, even if the symphonic form be entirely abrogated. It is a modern work in a modern style; it is intensely earnest, and may take its permanent place in the latter-day répertoire.

AMERICAN SYMPHONIES.

THE advance made in orchestral composition within the last score of years has been so rapid as to be almost phenomenal. At the time of the Civil War there were only one or two native composers who attempted classical music; now several American compositions obtain a hearing in the European concerts, an American composer leads great choral works of his own composition at English musical festivals, European editions of large works by cis-Atlantic musicians are not uncommon, and America takes her place among the creators in the most earnest musical forms. It was vastly different when George F. Bristow put forth the first of his five symphonies, in New York, in 1845. The symphonies of this composer can claim priority in the field, but are scarcely recognized as being the representative American works to-day. At present the various

universities vie with each other in honoring our composers, and in giving them positions in which they can exert their musical influence to the best effect, besides giving them opportunities to devote more time to the higher branches of composition than would be possible were they in the turmoil of the ordinary life of the concert-room. With John K. Paine professor at Harvard, Horatio W. Parker in the musical chair at Yale, E. A. MacDowell at Columbia, and George W. Chadwick at the head of the New England Conservatory of Music, some of the leading native composers are in a position to create art-works comparatively at their ease.

EDWARD A. MACDOWELL.

JOHN K. PAINE.

This famous composer has given forth two symphonies which have found a place in the native répertoire. The second is the more ambitious work of the two. Theodore Thomas, loyal worker in the cause of American art, has been instrumental in making both symphonies familiar to our audiences, and the works have had European hearing as well. The first symphony, in C minor (Op. 23), was composed in 1875, and first performed, in Boston, the next year, by Thomas's orchestra. The second symphony, called the "Spring Symphony," came five years later, and was performed in Cambridge, in Boston, and in Brooklyn (at a Philharmonic concert) within a short time of its completion. This latter work is graphic without becoming merely "program-music"; the cheerless winter is hinted at in the introduction, but in the first movement a tender clarinet theme comes as a premonition of awakening nature. Not without a struggle does winter give way, and the combat of the elements is well depicted. The movement ends with a beautiful violin theme, typical of the advent of the gentler season. The scherzo, — "A May Night Fantasy," — and the reverie of the succeeding adagio, are in excellent contrast. But the finale is the gem of it all, and culminates in a noble hymn of thanksgiving, which is broadly laid out, and affords an excellent climax.

Professor Paine's symphonic poem on Shakespeare's "Tempest" is also a dramatic and effective work, and has been most favorably received at the Boston symphony concerts.

GEORGE W. CHADWICK.

Mr. Chadwick made his début in American concerts with some splendid works in overture form, and his overtures are frequently heard on both sides of the Atlantic; but his symphonic work has an especial interest from the fact that he has managed to impart a distinctly American character to some of his movements, which gives them more of a national flavor than many of the symphonies by native composers. The scherzo of his first symphony (C major) indicates a path which Dvorák generally receives the credit of having discovered for us, and deserves especial notice on this account, as well as because of its spontaneous character. The second symphony, B-flat major, is somewhat more developed and broader, but follows the same general lines. The third symphony, F major, is the best work of the three. It won the prize of three hundred dollars offered by the National Conservatory, of New York, and received performance very soon thereafter at the Boston Symphony concerts, being conducted by the composer, October 20, 1894. There is much development in the first movement, and a really great climax. The larghetto, which comes second, has a very effective chief theme, given first upon the strings, after-

SAINT CECILIA.

By Domenichino.

wards upon the brasses; and there is good contrast between this simple theme and the more figurated second theme, in which greater contrapuntal work is presented. It is again in the scherzo, however, that the composer wins his chief triumph; for in this vein he seems to have all the easy grace of a Mendelssohn. There is much development in the finale, and the composer evidently follows the Brahms path of subtle elaboration; the working-up of two themes together and a brilliant coda form a strong climax to the work. Theodore Thomas prizes this symphony highly, and has spoken of it in most flattering terms.

It would go beyond the plan of this article to speak at length of all the symphonic works that have been composed by native musicians. Mr. Templeton Strong, an American who lives in Switzerland, has written a long and very ambitious work, in symphonic form, entitled "Sintram." In this he displays a control of orchestral resources that is equal to anything that has been done by any American. Mr. E. A. MacDowell has given to the native répertoire some of the best symphonic poems and fantasies which it possesses. A host of other composers and excellent compositions might be named, but the most representative American symphonies up to the present are those mentioned above.

SYMPHONIC POEMS.

It was Liszt who invented the title "*Poèmes Symphoniques*," which has been translated "Symphonic Poems," but ought rather to receive the adjective "orchestral," since in the French the word "symphonique" is applied to anything orchestral, whether symphonic or not. It is, therefore, a hopeless quest to seek a definite symphonic form in the so-called "Symphonic Poems." Even in Liszt's symphony entitled "Faust" one does not find a clear presentation of the Beethoven shape; nevertheless, the symphonic poems of Liszt may be considered as his best orchestral works. "Les Préludes," "Tasso," and "Mazeppa" all show a degree of skill in orchestration, and an interesting use of development, that prove Liszt a master of this particular field. Saint-Saëns has followed with some effective works in the same domain: "Rouet D'Omphale" and "Phæton" are good illustrations of his dramatic power in this direction; nor should the "Danse Macabre" be forgotten as an excellent study for many orchestral effects.

THREE AMERICAN ORCHESTRAS.

THE PHILHARMONIC ORCHESTRA.

Although Europe has long accustomed itself to the permanent orchestra, and one finds in Germany and France orchestras which have a degree of fixity, America has only in recent days achieved the dignity of bands of musicians that are other than sporadic and temporary. To New York belongs the honor of establishing the first of such associations; and the Philharmonic Society, which owes its foundation to an American musician (Mr. Uriah C. Hill, born in New York), brought forth the first orchestra that has had a long and continuous existence. The Philharmonic Orchestra is still one of the great elements in musical life in

G. W. CHADWICK.

New York, and its concerts began as long ago as 1842. This orchestra presents in some degree the essence of a musical commune; for it owes its musical season, not to the liberality of some wealthy music lover, but to the coöperative union of several professional musicians who constitute the association. Its members are all professionals, and in their hands rests the entire control of the

society. Bergmann, Dr. Leopold Damrosch, Adolph Neuendorf, Theodore Thomas, Anton Seidl, and Emil Paur are some of the famous conductors who have led this orchestra. Numerically it is the largest in America. It is, however, natural to suppose that the very best results can scarcely be attained under the rule of many. An orchestra must be a kingdom, even a despotism,—

GEORG HENSCHEL.

not a republic; and we find this well illustrated in the next of the great American orchestras, whose career we shall briefly trace.

THE BOSTON SYMPHONY ORCHESTRA.

This may at the outset be classed as the best orchestra that America has ever possessed, and it is probably the peer of any similar organization in the world. Before the foundation of this orchestra, Boston had made many attempts in orchestral music. As early as 1798 it possessed a Philo-harmonic orchestra, led by Gottlieb Graupner, a German musician who had played under Haydn in London. In 1833, through the efforts of the Academy of Music, an orchestra was founded that aimed as high as the Beethoven symphonies; and after 1850 we find the Germania Orchestra, with fifty performers, giving concerts in Boston, in which even the Beethoven Ninth Symphony was performed. After this the Harvard Musical Association, an offshoot of the Pierian Sodality of Harvard University, founded a series of orchestral concerts, which began in 1866; and subsequently another "Philharmonic Orchestra" was founded as a rival to the Harvard Orchestra.

None of these can be classed as in any degree permanent organizations. In 1881, the first really permanent orchestra of Boston was founded by the wealthy art patron, Henry L. Higginson. It was not chance which led to the permanency of this orchestra, but a definite and preconceived plan. The musicians were engaged with the promise that they should have regular orchestral employment which should lift them above the necessity of endeavoring to obtain chance engagements in picnics and parades, and allow them to devote their entire efforts to achieving a good classical result. Mr. Georg Henschel was the first conductor; and on the evening of Saturday, October 22, 1881, the Boston Symphony Orchestra began its career. There were sixty-seven members in the organization (there are now about ninety), and the first season consisted of twenty concerts; in the third season the number was increased to twenty-six concerts, but since that time the regular number has been reduced to twenty-four during each musical season. The preceding of each concert with a public rehearsal, given the day previous to the regular concert date, was an idea which was copied from the Philharmonic Orchestral Concerts of New York. During the first season the Beethoven symphonies were given as customary pabulum, the Ninth being the regular culmination; but in recent years, although some of Beethoven's symphonies are heard each season, this routine has been abolished. In 1884 Mr. Wilhelm Gericke came from Vienna to take charge of the orchestra, and to him is due the real perfection of the organization, for he began to build for futurity. He saw that the possibility of an actually permanent orchestra demanded the exclusion of many of the older musicians, who would gradually grow to be an incubus upon the organization; he foresaw that young artists were needed, who should grow up together, and become accustomed to each other's mode of playing. He worked

upon the principle of making great changes at once in order that few future changes might be necessary. The plan proved very successful, although it brought a storm about the devoted head of the reformer, in its early stages. The young men whom Mr. Gericke imported, are most of them still in the orchestra, although some of them are tending toward middle age; and through constant rehearsing with practically the same forces, the orchestra has attained an ensemble that may not be surpassed in Europe. If we owe the foundation of the orchestra, and its support during the crucial early days, to Mr. Higginson, none the less must we thank Mr. Gericke for its musical foundation and its present perfect discipline.

FRANZ KNEISEL.

Concert-meister (chief violinist) of Boston Symphony Orchestra.

It was in this orchestra that proper trumpet playing, instead of the wretched American substitution of the cornet, was first established in America. Among the artists brought to America by Mr. Gericke may be mentioned Mr. Schuecker, the harp-player; Mr. Roth, violinist; Mr. Svecenski, Mr. Müller, and a host of others, who are to-day with the orchestra; but, most important of all, he brought to us a new *Concert-meister*, or chief violinist, Mr. Franz Kneisel.

There was much opposition when these reforms were inaugurated, for many old musicians had come to look upon the well-equipped and endowed orchestra as a pleasant asylum from heterogeneous musical work. Most of the reforms alluded to took place in 1886.

In 1889 Mr. Gericke went to Europe, and Mr. Arthur Nikisch took his place. Mr. Nikisch might well be called an orchestral virtuoso. He played upon his orchestra as a pianist upon his instrument; he allowed his caprice and fantasy to rule in the highest degree; but in the routine of drilling the men, and building up the discipline of the new organization, he was less effective than his predecessor. He left, rather abruptly, after four years of service, leaving a high reputation for musicianship, but a somewhat deteriorated discipline to his orchestra.

In 1893 Mr. Emil Paur was called to the leadership, and again restored the very element which was lacking. Earnest rehearsals and the most careful ensemble again made the concerts memorable, although naturally enough the inaugurator of the strict régime, after a somewhat lax one, found plenty of opponents. In 1898 Mr. Paur went to New York to take charge of orchestral and operatic conducting there, while Mr. Gericke returned from abroad to reap some fruits of the glorious seeds he had sown.

The orchestra bids fair to be permanent in the fullest sense of the word; very few changes now take place in its ranks; the men work together with a perfect knowledge of what can be accomplished. Technical difficulties do not exist in this band of artists, and the result is the highest standard of orchestral music yet attained in this country.

In some degree the Boston Symphony Orchestra has become a model to the entire country; for by its tours to New York, Philadelphia, and other large cities, it has established a model of orchestral playing through a very large section of the United States. A compilation of the work of the orchestra, made by Mr. Fred. R. Comee in 1896, showed not far from *one thousand* perform-

ances in public; and counting all rehearsals, Boston concerts, outside concerts, etc., the men had even then played together *several thousand* times.

THE CHICAGO ORCHESTRA.

THE Chicago Orchestra, although a much younger orchestra than that of Boston, deserves a place of honor in the musical records of America, chiefly because of the great excellence and musical attainments of its conductor, Mr. Theodore Thomas. It came into existence in 1890, through the agreement of fifty merchants of Chicago, who had great and justified faith in Mr. Thomas, to pay a thousand dollars each, for three years, as a guarantee fund for the support of the orchestra. The organization was to give twenty or twenty-two concerts each season in Chicago, and travel about as much as might be deemed advisable. In one respect the orchestra was magnificently equipped at the start; for Mr. Thomas placed at its disposal his musical library of orchestral scores and parts, the largest private collection of the world, and worth not far from two hundred thousand dollars. The beginning was a very difficult one; for Chicago had not, like Boston, gone through a long series of orchestral experiments. But by the time of the World's Fair, in 1893, these difficulties had been largely overcome; and at this vast exposition one of the chief artistic features was the performance of this great band, under its famous conductor.

VICTOR HERBERT.

Mr. Thomas has not been without opposition, even in his own city; but this opposition has been gradually conquered, and the Chicago Orchestra at present may be considered the pioneer of a high standard of orchestral playing in the West. The programs have been fully as important as those of Boston or New York; for Mr. Thomas is a man of broadly catholic tastes, and has not neglected any school of orchestral composition in his concerts. The most important modern works are frequently heard in Chicago, even before the Eastern audiences have a chance to judge of their beauties or dissonances; and American composers have no cause to complain of any lukewarm support to their cause.

Other cities have made sporadic attempts at establishing orchestras; but these have not in a true sense been permanent, since in a true symphonic orchestra the men should be absolved from the necessity of playing anything less than classical music. The orchestral strivings of other cities have limited themselves to giving a certain number of classical concerts during the year, but outside of these engagements the musicians were allowed to shift for themselves. This is not the case with the Boston Symphony Orchestra or with that of Chicago. The establishment of orchestral concerts in Cincinnati, the Peabody Orchestral Concerts in Baltimore, deserve mention as praiseworthy efforts to give to the public a knowledge of classical music. The effort of Mr. Walter Damrosch in New York was more like the establishment of a permanent orchestra,

but even he has not been able to draw the men entirely into the classical fold. The Philharmonic Orchestra itself undergoes too many changes for the best effect.

Pittsburg has recently established a classical orchestra beginning with Frederic Archer as conductor, and continued under the direction of Victor Herbert. In New Haven, since the advent of Mr. Horatio W. Parker, there has been founded an orchestra which gives most creditable performances. St. Louis has had symphony concerts for several years, and almost every large city of the United States is now becoming active in this high orchestral field. But the fullest ideal of a permanent orchestra, an organization in which men can earn at least a living salary in the domain of classical music alone, has only been achieved in a large degree in the case of the Boston Symphony Orchestra; and even in this organization there are a few months in the year when the men are allowed to separate, and take such engagements as they may be able to secure. But this short hiatus has, in some degree, been bridged over by the establishment of popular concerts, in which some fifty of the ninety men constituting the orchestra play together during part of the summer; and as the others who are not thus employed are frequently the leading artists of the orchestra, who need no temporary engagements, and do not care for any but classical studies, it will be seen that the men have very nearly continuous work in a high grade of music. The result has been, as above stated, a most artistic one, and ought to guarantee a niche in the temple of American musical history to Mr. Henry L. Higginson, the founder of this great, American musical organization.

THEODORE THOMAS.

George Frideric Handel

PRELUDES OF BACH.

By E. Hamman.

STANDARD ORATORIOS

STANDARD ORATORIOS

THERE is no better point in the history of sacred music at which to begin the subject of oratorio than at the "Passion" music of Johann Sebastian Bach; for Bach's music marks the culmination of the old custom of reciting the Passion of our Lord on Good Friday, and he laid the foundation upon which modern oratorios have been built.

Bach wrote five settings of the "Passion," but of these only two survive. Two were lost by one of his sons, and the third, "St. Luke," is not considered genuine.

The earliest of Bach's settings of the "Passion" was that according to St. John, which was produced at the St. Nicholas Church in Leipsic in 1724. It is the least detailed and animated, and several incidents well-suited for musical treatment are passed over in silence. Bach was hampered by a libretto not suitable for musical setting, yet in everything that relates to musical style he proves himself to have reached the heights of ripe and perfect mastery.

The "St. Matthew Passion," which is a much larger work, and is more frequently heard in these days, was first produced in 1729, but was afterwards altered and extended, and did not appear in its present form until 1740. It was soon laid aside, and remained in obscurity for a century, being revived in 1829, at Berlin, by Mendelssohn. Since that time it has become a standard work, and is frequently performed.

The "Passion" according to St. Matthew is written in two parts, punctuated, in old times, by the sermon. The text was written by Christian Friedrich Henrici, otherwise known as "Picander," and includes portions of the twenty-fourth and twenty-seventh chapters of the gospel according to St. Matthew. The part of the evangelist is given to a tenor voice, and is in recitative form throughout. The other solo parts are those of Jesus, Judas, Peter, Pilate, the apostles, the chorus representing the people. The part of Jesus is distinguished by the accompaniment of a string quartet, which, as a critic once remarked, floats around the utterances of Christ like a glory, and invests them with a peculiar gentleness and grace.

The incidental choruses are short and vivacious, many of them being in madrigal form. The chorales, of which there are fifteen, were taken from the Lutheran service, and were therefore familiar to the audience, who joined with the choir in singing them. One of these chorales, beginning "Acknowledge me, my Keeper," appears five times in the "Passion" music, and is also used in the "Christmas Oratorio," but is differently harmonized each time. The whole work is written for double chorus, and double orchestra, composed of oboes, flutes, and stringed instruments.

In no other work of Bach is there such a store of lovely solo airs, nor did he ever write melodies more expressive and persuasive than those of the arias in the "St. Matthew Passion."

The "Christmas Oratorio" consists of a series of six short cantatas intended for use during the Christmas season, and was written in 1734. The first three parts, performed on the three days of Christmas week, deal with the journey to Bethlehem, the birth in the manger, the joy of Mary, and the thanksgiving over the advent of the Lord. In the first part is a fine bass aria with trumpet accompaniment, "Lord Almighty, King all glorious," which is followed by a chorale set to the words of Martin Luther's Christmas hymn. This hymn appears in different parts of the work, harmonized differently each time.

The second part opens with a beautiful pastoral symphony, graceful and idyllic in character, which pictures the shepherds watching their flocks by night. A bass recitative preludes an exquisite cradle song for alto, "Sleep, my Beloved, take thy Repose," a song which can hardly be excelled in

the sweetness and purity of the melody or the beauty of its instrumentation. Then follows the chorus "Glory to God in the Highest," which brings the second part to a close.

The fourth part, given on New Year's Day, deals with the naming of Jesus; the fifth with the visit of the three kings, and Herod's anxiety concerning the birth of Jesus, and was sung on New Year's Sunday. The sixth was sung on the festival of the Epiphany, and ends the oratorio with choruses of rejoicing over the final triumph of the Lord.

The work contains in all sixty-four numbers, and abounds with beautiful arias and choruses, but seldom more than the first two parts are given.

SAUL.

As a writer of oratorio no man has ever surpassed Händel. No one ever developed the resources of the chorus as he did. His wonderful powers of concentration enabled him to accomplish his work with unheard-of rapidity. He wrote nineteen oratorios during his residence in England, of which "Saul," the fourth, was given at the King's theatre in London, in January, 1739.

"Saul" was written in eighty-six days. It relates the story of King Saul and his dealings with David, and is most dramatic. While the oratorio as a whole is now seldom presented, it contains several numbers which are deservedly popular, notably the "Dead March," a magnificent dirge, grand in its simplicity, and conveying the deepest grief, though written in the major key.

ISRAEL IN EGYPT.

"Saul" was quickly followed by "Israel in Egypt," which is essentially a choral oratorio, containing twenty-eight double choruses, linked together by a few bars of recitative, with five arias and three duets. The second part of this oratorio was written in ten days, and was originally called "Moses' Song"; but the plagues of Egypt offering an excellent subject for descriptive writing, the first part was subsequently added, and the oratorio performed entire on April 4, 1739. During Händel's life it was given only nine times, and in spite of its excellence it was not a success. The chorus "They Loathed to Drink of the River," suggesting the sensations of the Egyptians when the water was turned to blood, is sometimes called the "Disgust Chorus." "Their Land Brought Forth Frogs," is an aria for mezzo soprano, with a very suggestive hopping accompaniment. Again, the chorus for sopranos and altos, "And there Came all Manner of Flies," set to a shrill, whirring accompaniment, is a most remarkable composition, equaled however, in descriptiveness, by the chorus, "He Sent a Thick Darkness over all the Land," which leads into what has been called "The Revenge" chorus, "He Smote all the First-born of Egypt."

The second part contains the great duet for basses, "The Lord is a Man of War," a most superb declamatory number.

SAMSON

was written in 1741, and contains "Honor and Arms," one of the most spirited bass songs ever written; also the beautiful aria for soprano, with trumpet obbligato, "Let the Bright Seraphim," a song which has for years been considered one of the supreme tests of great artists, and is frequently sung before Queen Victoria on state occasions. There is also an exquisitely tender aria, sung by the blind Samson, "Total Eclipse: no Sun, no Moon, all Dark amidst the Blaze of Noon," which in later years, after Händel had himself become blind, brought tears to his eyes on hearing it sung. Mention must also be made of a spirited fugued chorus, which is of significant meaning in view of the fact that Händel was a bachelor, and especially interesting in these days of female emancipation:

> "To man God's universal law
> Gave power to keep his wife in awe.
> Thus shall his life be ne'er dismayed,
> By female usurpation swayed."

JUDAS MACCABEUS,

written in thirty-two days, contains that stirring, exultant march, "See, the Conquering Hero Comes," which chorus originally belonged to the oratorio of "Joshua." This work was written to celebrate the return of the Duke of Cumberland from Scotland, after the battle of Culloden.

THE MESSIAH

is without doubt Händel's masterpiece; for it is not only based upon the most harmonious and symmetrical forms of art, but it appeals to the loftiest sentiment and universal religious devotion. Composed when he was fifty-six years of age, it repre-

sents the ripened product of his genius; and this sublime work was written in twenty-three days. Through more than a century and a half it has retained its hold upon the public, and it is at the present day more frequently performed than any other oratorio ever written. The "Messiah" was first performed at Dublin on April 13, 1742, for the benefit of several charities. In England it was first performed in 1743 at Covent Garden Theatre, on which occasion King George II. was present, and was so impressed with the grandeur of the work, that when the "Hallelujah" chorus was sung he and all the audience stood up, and remained standing until the conclusion of the number, — a reverent custom which is observed to this day.

CHOIR WESTMINSTER ABBEY.

The "Messiah" was the last oratorio given by Händel. This performance took place on the 6th of April, 1759. After it was over he was seized with a deathly faintness, and on returning home he was placed on the bed from which he never rose again, for he died on Friday, the 13th of April.

Although the "Messiah" was performed thirty-four times during the life of Händel, it never was given on a scale worthy of its merits until 1784, when the Händel commemoration took place at Westminster Abbey, and an orchestra of two hundred and forty-two players, with a chorus of two hundred and sixty-seven was employed. On this occasion King George III., who was present, ordered a repetition of the "Hallelujah" and "Amen" choruses.

The first part contains the well-known aria for tenor, "Every valley shall be exalted." The grandest chorus in this part, "For unto us a Child is born," is preceded by a bass aria, "The people that walked in darkness," of a somewhat gruesome nature. The chorus leads up to the announcements of the names of the Messiah, "Wonderful! Counsellor," reaching a tremendous climax, which is followed by a short but exquisite Pastoral Symphony for strings.

The second part is the most impressive, and contains the beautiful song for contralto, "He was despised," with its wonderfully suggestive accompaniment, and "How beautiful are the feet," for soprano, while to the bass is assigned a stirring aria, "Why do the Heathen rage together?" In the spirited chorus "All we like Sheep have gone astray," Händel has given a most graphic musical picture of the wanderings of a scattered flock, ending with a beautiful adagio. The second part closes with the magnificent "Hallelujah" chorus, which is the real climax of the work and the composer's greatest triumph. It opens with exultant shouts of "Hallelujah." Then follow three simple phrases, which form the groundwork for the "Hallelujah," and upon them, with wonderful harmonic effects, is built up the

chorus which has never been excelled, and of which Händel is said to have exclaimed, when asked as to the impression under the influence of which he composed it, "I did think I did see all Heaven before me, and the great God himself."

It would seem that after the "Hallelujah" chorus, a third part would result in an anti-climax; but Händel has carried the work on with undiminished interest, and opens with that most sublime Aria, "I know that my Redeemer liveth," in which the air is supported by the simplest possible accompaniment. The stirring bass air with trumpet obligato, "The Trumpet shall sound," leads to the finale, the only chorus written which will bear comparison with the "Hallelujah," "Worthy is the Lamb," with its magnificent peroration, "Amen."

THE CREATION.

Haydn was sixty-five years of age when he undertook the composition of the "Creation," which has proved second only in popularity, to the "Messiah." "Never was I so pious as when composing the 'Creation,'" he said afterwards. "I knelt down every day, and prayed God to strengthen me for the work." He spent two years in its composition, and when urged to hurry it to a conclusion he replied "I spend much time over it because I intend it to last a long time."

The libretto was compiled by Lydley from Milton's "Paradise Lost." and had been intended for use by Händel, who had not availed himself of it. The "Creation" was first performed in private at the Schwartzenberg Palace in 1798, and the following year was given in public at the National Theatre, Vienna. It met with immediate success, and was soon performed in all parts of the civilized world.

The overture represents chaos, out of which order is gradually developed. A short recitative by Raphael, "In the beginning," leads to a chorus, "And the Spirit of God moved upon the Face of the Waters," reaching an impressive climax at the words, "And there was Light."

The whole of the first part is given to the establishment of order amongst the elements. Raphael describes the making of the firmament and the separation of the land and water in a recitative, leading into the beautiful aria, "Rolling in Foaming Billows," in which the music represents every effect of the water, from the roaring billows to the murmuring of the limpid brook. Then follows the aria for soprano, "With verdure clad," which Haydn recast three times before he was satisfied with it, and which remains to this day one of the greatest and most popular soprano arias. The establishment of night and day, described by Uriel (tenor), leads to the magnificent chorus, "The Heavens are telling," in which full chorus and orchestra are employed with sonorous effect, and a cadence of splendid power is reached.

The second part relates the creation of the various living creatures; the first aria, "On Mighty Pens," describing the majestic flight of the eagle, the joyous note of the lark, and the cooing of the doves. The creation of fish is described in a trio between Gabriel, Uriel, and Raphael, the upheaval of Leviathan from the deep being graphically pictured by the double-basses.

Perhaps the most definite descriptive music ever written is the accompaniment of the recitative of Raphael, telling of the production of various four-footed animals, the "tawny lion," the "flexible tiger," the "nimble stag," the "noble steed," cattle, flocks, hosts of insects, and finally the worm.

Then comes the creation of Adam and Eve in the beautiful air "In Native Worth," for tenor. The second part ends with a chorus of great power, "Achieved is the glorious Work," in fugue form, and closing with a "Gloria" and "Hallelujah" of majestic proportions.

The third part is devoted to the praise of the Almighty for the work accomplished, and opens with a symphonic introduction descriptive of the first morning of the creation, in which flutes and horns, in combination with strings, are used with exquisite effect. This part contains the pleasing duet between Adam and Eve, "Graceful Consort." The oratorio ends with the chorus "Sing the Lord, ye Voices All," beginning with a majestic andante movement, soon developing into a fugue, and closing in a laudamus of great beauty, in which the solo voices are set off against the choral and orchestral masses with striking effect.

The "Creation" was Haydn's greatest work; and his last appearance in public was at a performance of it in 1808, at Vienna. It was a memorable performance; and the audience included people of the highest rank, who came to do honor to the aged composer. Haydn was carried into the hall in his armchair, and was received with a flourish of trumpets and joyous shouts. When he

complained of a draught he was at once enveloped in many shawls by the ladies around him. He was overcome with emotion. When the passage "And there was light" was reached, and the audience broke out into tumultuous applause, he made a motion of his hands towards heaven, and exclaimed, "It came thence." Such was his agitation that he was obliged to leave the hall at the end of the first part. Beethoven, his pupil, kissed his hand and forehead, the audience crowded round him, and tearful eyes followed him to his carriage. He died shortly after.

THE SEASONS.

Two years after the completion of the "Creation" Haydn wrote his last oratorio, "The Seasons," to words compiled by Baron von Swieten from Thomson's well-known poem. Strictly speaking it can hardly be classed as an oratorio, as it partakes also of the style of opera and of cantata. The music is bright and fresh from first to last; and the work contains some well-known gems, such as, "With Joy the Impatient Husbandman," and the celebrated storm chorus, "Hark! the deep tremendous Voice," which has been the model for all subsequent storm descriptions

THE MOUNT OF OLIVES.

Beethoven wrote but one oratorio, the "Mount of Olives" (*Christus am Oelberg*), begun in 1800, completed during the following year, and produced at Vienna in 1803, in the Theatre an der Wien. This work was received with enthusiasm, and was repeated three times during the year, notwithstanding the fact that the libretto, which was hastily and illogically constructed, eventually stood in the way of complete success, for it fails entirely to reflect the sorrowful character of the scene which it is intended to depict, and in parts even borders on the grotesque. In England various attempts have been made, by altering the text, to avoid the incongruities of the original narrative; and at one time it was produced with an entirely new text, called "Engedi," the words of which were written by Dr. Henry Hudson of Dublin, and founded upon the persecution of David by Saul in the wilderness. This story, being unsuitable for the music, did not prove successful, and a later version of the original story was written by the Rev. J. Troutbeck.

As music *per se* the "Mount of Olives" is entrancingly beautiful, and possesses all the freshness of Beethoven's first style. Seated in his favorite spot, between the two trunks of an oak tree in the park of Schönbrunn, he worked amidst the most inspiring surroundings. "Woods, trees, and rocks give the response which man requires," he wrote to Madame von Drossdick. "Every tree seems to say, 'Holy, Holy!'" It was the first of Beethoven's vocal compositions on a large scale, and was written for three solo voices, — Jesus, Peter, and a Seraph, — a chorus and orchestra. The story is a distorted version of the agony in the Garden of Gethsemane, and the seizure of Jesus by the soldiers.

The score opens with an adagio introduction for the orchestra of a very dramatic character, which has been pronounced a *chef-d'œuvre* of introductions. The first number is a touching and simple aria for tenor, "All my soul within me shudders," sung by Jesus. A scene and aria by the Seraph follows, and leads into a brilliant obbligato with chorus, "O triumph all ye ransomed." The next is a duet of an elaborate nature between Jesus and the Seraph. After a short recitative in which Jesus welcomes death, comes a chorus of soldiers in march time, interspersed with the cries of the people demanding his death, and the lamentations of the apostles. A dialogue between Jesus and Peter leads into a trio between Jesus, Peter, and the Seraph, with chorus "O Sons of Men, with gladness," which has been called "the crowning anomaly of the work." The closing number is one which can hardly be surpassed in majesty or power, — a chorus of angels, introduced with a short but massive symphony leading to a jubilant shout of Hallelujah, finally resolves itself into a magnificent fugue, accompanied with all the wealth of instrumentation of which Beethoven was master.

One can only regret, as Beethoven himself did, that a more fitting text had not been found for such glorious music.

THE LAST JUDGMENT.

Spohr's greatest oratorio, originally called "The Last Things," was produced in 1826. It is a peculiarly choral work, and has met with much success in England, though seldom performed in America. The "Last Judgment" may be regarded as a stepping-stone from Beethoven to Mendelssohn, for it was the only large work produced,

which achieved success, during the long interval between the "Mount of Olives" and "St. Paul."

ST. PAUL.

Mendelssohn wrote two oratorios, "St. Paul" and "Elijah," also a smaller work, "The Hymn of Praise," a symphony-cantata.

"St. Paul" was completed when Mendelssohn was twenty-six years old, for the Cecilien Verein of Frankfort, but was not produced until 1836, at the Lower Rhine Festival at Düsseldorf, May 22. After the first performance Mendelssohn revised the work, and cut out fourteen numbers.

Its three principal themes are the martyrdom of St. Stephen, the conversion of St. Paul, and his

MOZART SINGING HIS REQUIEM.

subsequent career as an apostle. In this work occur the beautiful arias, "Jerusalem, thou that killest the Prophets," "But the Lord is mindful of his own," and "How lovely are the Messengers," besides a number of powerful choruses.

ELIJAH.

But the most popular of all Mendelssohn's choral works is the oratorio of "Elijah," which was first considered in 1837, and performed at the Birmingham Festival on August 18, 1846. Regardless of the rigid injunction of the committee, that the public should not testify its approval by applause, there were eight encores, besides which the composer, who conducted the performance, was called out at the close. Notwithstanding its success Mendelssohn was not satisfied with the work as a whole, and made numerous changes.

The oratorio opens with a short recitative, — Elijah's prophecy of a drought, — which leads into a short sombre overture indicative of the distress which is to follow; and in the first part are to be found the duet for two sopranos, "Lord, bow thine Ear to our Prayer," the beautiful tenor solo, "If with all your Hearts," and the equally beautiful quartet, "For He shall give His Angels charge over thee," the melody of which, though simple, is worked up with skillful effect. The episode of the raising of the widow's son ends

with the chorus, "Blessed are the Men who fear Him."

The next scene deals with Ahab and the prophets of Baal, in which occurs the double chorus, "Baal, we cry to thee," grand in its rugged, abrupt melodies and barbaric energy. Then follows the calm prayer of Elijah, "Lord God of Abraham," leading into the simple chorale, "Cast thy Burden upon the Lord." Elijah now calls for the fire to descend upon the altar, and then follows an aria for bass, "Is not His Word like a Fire?" and a lovely arioso for alto, "Woe unto them." A dialogue between the Prophet, the People, and the Youth, whom Elijah bids look towards the sea, leads to an orchestral climax as the storm approaches and the rain descends, when the People break out with a passionate chorus of "Thanks be to God."

The second part opens with a brilliant soprano solo, "Hear ye, Israel," which leads into the magnificent chorus, "Be not afraid." This part also contains the grand, but pathetic, aria, "It is enough," and the exquisite chorus, "He watching over Israel." Elijah complains, "O Lord, I have labored in vain," in response to which comes a contralto aria of unexcelled beauty, "O, rest in the Lord."

The next scene, which is the most dramatic in the oratorio, describes the presence of the Lord, and ends in a double chorus of grand proportions, — "The seraphim above Him cried one to the other, Holy, holy, holy, is God the Lord."

The next scene depicts the coming of the chariot, and the whirlwind by which Elijah is caught up into heaven, the climax being reached in a chorus of wonderful dramatic intensity, "And when the Lord would take him away." A tenor aria, "Then, then, shall the Righteous shine," and a brief soprano solo, introduce the chorus, "Behold, my Servant," and after a beautiful quartet a massive fugue, "And then shall your Light break forth," closes this magnificent work.

Mendelssohn also left an unfinished oratorio, "Christus," which was laid out upon a magnificent scale, and was intended to be the third in the series with Saint Paul and Elijah. Only eight numbers were completed.

PARADISE AND THE PERI,

by Schumann, is classed as a secular oratorio, the libretto being taken from the second poem in Moore's "Lalla Rookh." It was written in 1843, and first performed at Leipsic, on December 4th of that year. It is in three parts, — for solo voices, chorus, and orchestra, the Peri being soprano, the Angel alto, the Youth tenor, the Horseman baritone, the King of Gamba bass, and the Maiden soprano. The choruses represent Indians, Angels, Houris, and Genii of the Nile, while the part of Narrator (to whose employment is due the classification of the work as an oratorio) is divided amongst the various voices. The first and second parts are the most interesting, and contain some beautiful gems, with rich orchestral coloring; but the third part is long and wearisome, and the whole work, it has been suggested, would have been less monotonous had the part of the narrator been omitted.

ELI,

by Sir Michael Costa, is a work of high musical culture, but by no means a work of genius. It is tasteful, dignified, often beautiful, and occasionally grand. It contains many elements of popularity, but is seldom heard in America. "Eli" was produced at the Birmingham Festival, in 1855.

PARADISE LOST,

composed by Rubinstein, in 1859, was called by him a sacred opera, though it is in genuine oratorio form. It is in three parts, of which the second is occasionally given by oratorio and choral societies. The third part contains a chorus, "Fierce raged the Billows," describing the separation of land from water, in which the instrumentation is wonderfully effective, and exhibits Rubinstein's marvelous skill as a "water-painter." The seventh chorus, also, which gives a description of the awakening of life, is extremely vivid; and the final chorus, working up to a grand fugue, "Praise the Almighty One," and closing with mighty outbursts of Hallelujah, is majestic.

In 1870 Rubinstein produced another sacred opera, entitled

THE TOWER OF BABEL.

The music of this opera is exceedingly dramatic, and characteristic of the composer. The story is a travesty on sacred history, bristling with anachronisms, and with incidents which bring the

sublime dangerously near to the ridiculous. The stage requirements also are such as to make the work almost impracticable.

THE LEGEND OF THE HOLY ELIZABETH

was written by Franz Liszt, in 1864, and first produced at Buda-Pesth in the following year. The work tells the story of the Holy Elizabeth, a young lady of Hungary, born A. D. 1207, whose life throughout was most exemplary under very trying circumstances. The musical treatment of this story is extremely powerful, full of rich coloring and brilliant effect. Two years after writing this oratorio Liszt completed a second,

CHRISTUS,

for which he selected a series of events connected with the offices of the church, according to its Vulgate and its Litany. It is a most dignified, majestic, and dramatic work, and has been characterized as "A cycle of scenes such as only the victorious mastery of the subject by inward perception can give, and such as only the artist can draw who dominates all the conditions apart like a king, and has reconciled his soul with the absolute truth and power of the Eternal."

THE PRODIGAL SON

is the first of three oratorios ever written by Sir Arthur Sullivan, and was produced in 1869 when he was twenty-seven years of age, at the Worcester Festival in England. It is a short work, full of melody, of eighteen numbers, of which several have become popular, notably a song for alto, "Love not the World"; one for soprano, "O, that Thou hadst hearkened"; and the chorus, "O that men would therefore praise the Lord," which is the longest and best constructed number in the work. This oratorio was followed in 1873 by a much larger work,

THE LIGHT OF THE WORLD,

which was given for the first time at the Birmingham Festival. This work was designed to set forth the human aspects of the life of our Lord upon earth. The first part is divided into four scenes, of which the first, called "Bethany," after a prologue chorus, opens with a quiet pastoral movement for orchestra, followed by a tenor recitative. It contains a male chorus, "Let us now go even unto Bethlehem," and a melodious soprano solo, "My soul doth magnify the Lord," also a chorus, "The whole earth is at rest," which is full of striking contrasts, and the final chorus, "I will pour my Spirit," which rises to a very effective climax. The second scene, called "Nazareth," is dramatic, relating the declaration of Jesus in the synagogue as the object of the prophecy of Isaiah. At the third declaration the Jews break into a furious chorus, "Why hear ye him?" which is followed by a tender solo, "Lord, who hath believed our Report?" and an effective quintet, "Doubtless Thou art our Father." The scene ends with a chorus "He maketh the Sun to rise," which is perhaps the most beautiful in the work.

The third scene, "Lazarus," describes the journey to Bethany, and is mournful and sombre, but is offset by the fourth scene "The Way to Jerusalem," which is brilliant throughout. It contains a charming three-part chorus for children's voices, with harp accompaniment, and a brilliant soprano solo, "Tell ye the Daughter of Zion," also a vigorous chorus of the disciples, "Blessed be the Kingdom."

The overture of the second part is very effective, and is intended to indicate the angry feelings caused by the presence of Jesus in Jerusalem. A baritone solo, "When the Son of Man shall come in his Glory," is one of the most vigorous in the oratorio; and a female chorus, "The Hour is come," is very effective, as is also a six-part unaccompanied chorus, "The Lord is Risen," and the final chorus, "Him hath God exalted," in fugal form.

Sullivan's third oratorio, "The Martyr of Antioch," was written in 1880, but is not well known in America.

Other oratorios which met with success in England are "John the Baptist," 1873, and the "Resurrection," 1876, by MacFarren; and "The Rose of Sharon," by Mackenzie, 1884, which was received with the utmost enthusiasm.

THE REDEMPTION.

As early as 1867 Gounod began what he intended to be the work of his life. During his sojourn in Rome he wrote the words of the "Redemption," and composed the "March to Calvary," which

MUSIC.

By C. Kiesel.

occurs in the first part, and "Pentecost" which is the opening of the first division of the third part. The work was not completed and produced until 1882, when it was given at the Birmingham Festival.

This work is called a "Sacred Trilogy," and it is divided as follows:

Prologue. The Creation.
Part I. Calvary.
Part II. From the Resurrection to the Ascension.
Part III. The Pentecost.

In this work the composer makes use of the Wagnerian *Leitmotif*, this phrase,

appearing in the first part, and whenever allusion is made to the divine atonement. It is given out first of all as a violin solo in the prologue, during the course of which it is again heard twice; the second time given by all the strings, and the third

BEETHOVEN AT SCHÖNBRUNN.

time by the flute and clarinet in responsive form. It is heard later on, twice in the scene of the crucifixion, once in the Saviour's promise to the thieves on the cross, once on his appearance to the holy women, and twice in the ascension.

In the second part there is a beautiful trio for first and second soprano and alto, "The Lord, He has risen again," which is followed by the most effective number in the work,— a soprano obbligato solo, accompanied by the whole chorus and orchestra, and reaching a powerful climax in C in alto. The finale of this portion is most effective, beginning with a massive chorus, "Unfold, ye Portals." A celestial chorus, accompanied by harps and trumpets, sings, "But who is he, the King of Glory?" The terrestrial chorus replies in stately unison, "He who Death overcame." After a repetition of question and answer the two choirs massed join in the jubilant chorus, "Unfold! for lo the King comes nigh!" In this work Gounod has made simplicity an absolute rule; the long recitatives of the narrators on a single note, or rising and descending by semitones, the solo parts proceeding invariably by intervals of a third, a sixth, or octave, while the choral and orchestral parts adhere to a constant repetition of the same

chords, impart a monotony and heaviness to the work which is only relieved by the gorgeousness of the orchestral coloring. Gounod calls it "music treated in the style of fresco."

MORS ET VITA,

a sequel to the "Redemption," is divided into a prologue and three parts, and deals with the sleep of the dead, the resurrection, and the judgment. The third part, "Vita," includes the vision of St. John, and closes with an "Hosanna in Excelsis," rejoicing in the glorious vision of the heavenly Jerusalem. There are in this work three representative themes, of which the first, consisting of three major seconds, is intended to represent the terror inspired by the inflexibility of justice and the anguish of punishment.

The second melodic form is expressive of sorrow and tears, but by the change of a single note, and the use of the major key, is made to express consolation and joy. The third announces the awakening of the dead at the terrifying call of the angelic trumpets.

The work is more melodious than the "Redemption"; and both are full of genuine religious sentiment, though the composer has failed to reach the heights attained by some of the older masters in sacred music, and has at times descended to the depths of commonplace triviality.

A composition distinguished by the vital force and sustained vigor of the music is

ARMINIUS,

a secular oratorio by Max Bruch. The work consists of nineteen numbers, of which the first two form an introduction, and lead to a chorus of Romans, of warlike tone. Part two, beginning with the sixth number, opens with an orchestral "scene" in the forest, and leads to a prayer to Wodan by the priestess, vigorously supported by the chorus of people, and developing into a powerful five-part chorus. The eighth number, a recitative by Arminius, and chorus, tells of the insurrection. Number ten is a lament, written for chorus in six parts, with a quartet of soloists; after which Arminius (the historic German hero, who defeated the Romans), in a vigorous recitative, stimulates his companions, and urges them to battle, the following number, his battle-song, being one of the most vigorous songs in the work, and developing into a strenuous chorus as the people take up the call "to arms!"

The dramatic intensity of the work increases as the story of the battle is told, and the oratorio ends in a magnificent hymn to Freedom.

When this work was first performed in Boston, in 1882, by the Händel and Haydn Society, the composer accepted the invitation of the society, and conducted the performance himself, infusing into it his own enthusiasm and magnetism.

Many of the most effective sacred works have been composed in forms smaller than that of oratorio, and yet are marked by characteristics which have ensured for them a place amongst works of genius. Under the head of "cantatas" we have Mendelssohn's

HYMN OF PRAISE,

a work of unexcelled beauty, and the Christmas Oratorio of Saint-Saëns which, while in oratorio form, hardly exceeds the limits of cantata.

The "Hymn of Praise," a symphony cantata, was written in 1840, for the fourth centennial celebration at Leipzig of the art of printing. It was received with enthusiasm, and Mendelssohn was honored the following evening by a torch light procession.

The work opens with a symphony which clearly indicates the spirit of the cantata, and is followed by the chorus, "All that has Life and Breath." The best-known selections from the "Hymn of Praise" are the exquisite duets for soprano and alto, "I waited for the Lord," and that for soprano and tenor, "My Song shall always be Thy Mercy"; while of the choruses, "The Night is departing" forms the climax of the work, and is beautifully constructed, taking fugal form on the words, "Therefore let us cast off the works of darkness." The final chorus, "Ye Nations offer to the Lord," is stately and impressive, closing with a fortissimo delivery of the splendid choral motive, "All that has Life and Breath."

THE CHRISTMAS ORATORIO

by Saint-Saëns is a short work, hardly exceeding the limits of a cantata, but in oratorio form, and abounding in graceful conceits and delicate fancies. It is written for five solo voices and chorus, with accompaniment of strings and organ, with the harp also in one number. Every number may be con-

sidered a gem; but the most dramatic is the chorus, "Wherefore are the Nations raging?" in which the voice parts are set off against an agitated accompaniment with great effect.

The Requiem service of the Roman Catholic Church has formed the subject of some remarkable compositions, of which we have only space to deal with four, viz., those of Mozart, Berlioz, Verdi, and the non-Catholic German Requiem of Brahms.

MOZART'S "REQUIEM"

has been called a "great monument of musical skill, a matchless requiem of awful majesty and divine beauty." It was written in Vienna in 1791, and was left in an unfinished state by the composer, who gave instructions as to its completion, while on his death-bed, to Süssmayer; but its unity and perfection in form and design point to the fact that every thought and idea in it are the inspired work of the dying master.

The introduction is a slow, mournful theme, giving the subject of the opening movement which begins with the impressive strain "Requiem aeternam done eis," gradually brightening in the phrase, "Et Lux perpetua," and reaching a grand burst of exultation in the "Te decet hymnus." The "Kyrie eleison," which closes the number, is a slow and complicated fugue, sublime in its effect, though sombre in color.

The "Dies Irae" for chorus, is dramatic in character, and the orchestral accompaniment is vigorous and impetuous. Great intensity is reached on the verse, "Quantus tremor est futurus," which vividly pictures the last judgment with all its terrors. The "Tuba mirum," for bass, in the following number, has an almost supernatural trombone obbligato.

The most elegant and poetical movement in the work is the "Lacrymosa," which, beginning with delicate, graceful style, broadens into a crescendo of immense power.

The "Agnus Dei" which ends the work, is a composition of great beauty, with an accompaniment of solemn majesty, and closing with the fugue of the opening "Kyrie" on the words "Lux aeterna."

There is a mysterious story concerning the composition of this magnificent Requiem, to the effect that Mozart, at a time when his health and his financial affairs were both in a serious condition, received a visit from a mysterious stranger, who, enjoining the strictest secrecy, commissioned him to write a Requiem for an unknown individual. The price was agreed upon, and Mozart set to work with ardor. The work was, however, interrupted by an order to write an opera for the approaching coronation of King Leopold II. at Prague. As Mozart was stepping into a carriage to go to Prague the mysterious stranger suddenly appeared

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before him, and asked what had become of the Requiem. Mozart promised to finish it on his return. His duties at Prague over, Mozart returned to his home and set to work, but the recent excitement and exertion had been too much for him. Fainting fits came on, and he fell into a state of depression, during which he was seized with the idea that some one had poisoned him, and that the Requiem would be used for himself. His health continued to fail, and on the day before his death he desired that the score should be brought to him in bed, where he sang the alto part, Benedict Shack singing soprano, Hofer his brother-in-law the tenor, and Gerl the bass. When they reached the first part of the "Lacrymosa" Mozart suddenly burst into tears, and laid aside the score.

THE "REQUIEM" OF BERLIOZ

is a most remarkable work, possessing the largest score that exists, in number of parts. It is a work which has been severely criticised for its innovations on musical forms and the daring treatment of the subject. Berlioz was not a religious man, and it was apparently his purpose to give free rein to his fancy, and to express the

emotions of sublimity, terror, and awe, suggested by his subject. In this he has succeeded at the expense of the set form of the Mass and of deep religious feeling.

The "Requiem" was first performed in 1837, when it was sung at the Invalides, in Paris, in memory of General Damremont and the soldiers

DUDLEY BUCK.

killed at the Battle of Constantia. The work opens with a brief, but majestic, instrumental introduction, after which the voices enter in a solemn and beautiful strain upon the "Requiem." The "Kyrie" is very impressive, the chant of the sopranos being answered by the tenors and basses in unison, and the number closing with a dirge by the orchestra.

The most impressive and dramatic number of the work is the "Dies Irae," in which the composer seems to have exhausted the resources of the orchestra to produce the feeling of sublimity and overwhelming power. Berlioz himself says that he had "carefully prepared it [the climax] with combinations and proportions never attempted before or since, and which, rightly performed, gives such a picture of the Last Judgment as I believe is destined to live."

There are four bands of trumpets, trombones, and tubas, stationed at the four corners of the stage, in addition to the regular orchestra. After the climax of the motive, "Quantus tremor," there is a pause, like the calm before a storm. Suddenly the combined bands and orchestra crash in with tremendous power in the announcement of the terrors of the day of judgment. At the culmination the bass voices enter in unison upon the words "Tuba mirum," in the midst of another storm, in which the effect is increased by an unusual number of kettle-drums.

In the "Hostias et Preces," Berlioz displays another eccentricity by giving the accompaniment at the close of the first phrase to three flutes and eight tenor trombones, a combination which is again used in the "Agnus Dei," a chorus for male voices. The work is closed with a return to the music of the opening number, and dies away softly in an "Amen."

Throughout the work, though some numbers are long, the interest is sustained by means of the rich and ever-changing instrumentation.

Habeneck, the violinist, conducted the "Requiem" at its first performance, and Habeneck was addicted to snuff-taking. At the point where the pause occurs before the crash of bands in the Day of Judgment passage, Habeneck laid down his baton to indulge in his favorite habit. Berlioz, who was seated near by, immediately sprang to the front, and marked the four great beats of the new movement, thus saving the performance. Berlioz always declared that Habeneck's indulgence at this critical moment was a deliberate attempt to wreck the work.

THE MANZONI REQUIEM,

by Verdi, is a work of strong dramatic power, and an example of the inexhaustible resources of the composer's invention. While it does not lose its devotional character, and while it contains contrapuntal effects and a few touches of the canon and fugue forms, it yet cuts loose from ancient traditions so far that Von Bülow, who was a caustic critic, called it "an opera in ecclesiastical costume."

The first part, consisting of the "Requiem" and "Kyrie," is written in purely religious style, opening and closing pianissimo. The second part, beginning with the "Dies Irae," is in strong contrast with the first, and is worked up in dra-

matic style, with free accompaniment. The most effective number is a trio for soprano, alto, and tenor, which is continually interwoven with the chorus shouting fortissimo, "Rex tremendae majestatis," but resolves into the prayer "Recordare," written in operatic style for soprano and alto.

The gem of the Mass is the "Agnus Dei," a duet for soprano and alto, full of melodious inspiration, and the instrumentation of the accompaniment full of charming color. This Requiem was written for M. Alessandro Manzoni, an admired friend of Verdi, and the founder of the romantic school of Italian literature, and is therefore known as the "Manzoni" Requiem. The "Libera Mea" was, however, written some years before, and was intended for a Requiem projected in honor of Rossini. It was Verdi's own suggestion that the Italian composers should combine to write a Requiem as a tribute to Rossini's memory. The parts were assigned and the work sent in; but such was the unevenness of merit, and the lack of cohesiveness of the different parts, that the matter was quietly allowed to drop, and the manuscripts were later returned to their writers. Verdi's number was the "Libera Mea," and the examiner, M. Mazzucato, was so strongly impressed with its merits, that he asked Verdi to compose the whole Requiem. This was done, but the work was used in honor of Manzoni, instead of Rossini.

THE GERMAN REQUIEM.

Although Brahms had been proclaimed to the world a genius as early as 1853, by no less an authority than Robert Schumann, it was the production of his "German Requiem," in 1868, which made him famous, and confirmed all that Schumann had said of him.

Notwithstanding the fact that it is called a Requiem, this work is not in any sense a religious service. The poem is full of consolation for the mourner, assurances of future joy, warnings against the world, and the victory of the saints over death. It is strictly speaking a sacred cantata. It is a work of great difficulty, and requires an extraordinary chorus and orchestra; but it is a work of much power and beauty, in which the composer cuts loose from ordinary methods, and yet achieves his ends by pure classical form and the use of legitimate means. The work has seven numbers, — two baritone solos and chorus, soprano solo and chorus, and four separate choruses.

Cherubini has written two requiems in regular Catholic form, which are models of pure and classical counterpoint.

The "Stabat Mater" has been a favorite text for writers of church music, and Palestrina, Pergolesi, Haydn, Astorga, and many other composers, have left grand music to its words. Coming to more modern times,

ROSSINI'S STABAT MATER

is classed amongst the great "Stabat Maters," and is undoubtedly the most popular of them all. The music is intensely dramatic throughout; but the numbers which seem to have taken the firmest hold on the popular mind are the "Cujus Animan," a clear-cut melody for tenor, brilliant and jubilant in character (for a sorrowful subject!), and the "Inflammatus," a very dramatic soprano solo with powerful orchestral accompaniment. A voice of exceptional range, power, and flexibility is required for this number, in which a ringing climax is reached upon the high C. The cause of the popularity of this work is to be found in its delightful and fascinating melodies, and the graceful bravura, which when delivered by accomplished artists makes a great impression upon the average audience.

Rossini wrote this work, or the first part of it, in 1832, for his friend Don Valera, the Spanish minister, and it was not intended to be made public. He fell ill before its completion, and the last four numbers were written by Tadolini. On the death of Don Valera, some eight years later, his heir sold the work to a Paris publisher. Rossini immediately claimed copyright and brought action, in which he was successful. He then wrote the four final numbers to replace those of Tadolini, and sold his work to Troupenas, the publisher. The first complete performance of it took place at the Salle Ventadour in Paris, January 7, 1842, with Grisi, Albertazzi, Mario, and Tamburini taking the principal parts.

DVORÁK'S STABAT MATER.

The work which was the immediate cause of Dvorák's rise to celebrity was his "Stabat Mater," composed in 1875. It was sent to the minister of public instruction of Austria in the hope that it might secure a grant of two hundred dollars, but it was not considered worthy. Owing to the

efforts of Joachim, the violinist, a hearing was secured for it in London in 1883, at Albert Hall; and other performances followed at the Worcester and Hereford festivals.

The "Stabat Mater" is written for soli, chorus and orchestra, and comprises ten numbers. Its general characteristics are simple, tuneful melody, which never becomes wearisome, rich combinations of harmony, fine full-toned accompaniments, remarkable changes of key, and exquisite instrumentation. The materials are simple; but they are worked up with great skill, and the general effect is tragic rather than pathetic. The "Quis est Homo" is a quartet, fine in idea and painfully sad. The "Eia Mater" is a chorus built up on a brief motive, which is augmented with surprising power and skill. The "Fac ut portem" is a duet for soprano and tenor, responsive in character. The ninth number is the "Inflammatus," an alto solo, built upon two subjects, the first majestic and the second pathetic in character, and it is one of the most masterly in the whole work. The tenth number for quartet and chorus is constructed substantially upon the same themes which appeared in the first, and closes with an "Amen" worked up with great contrapuntal skill.

Its general melodic and harmonic beauty is indisputable, but the unblushing maltreatment of the words in order to accommodate rhythms has caused some unfavorable comment.

AMERICAN COMPOSERS.

ST. PETER.

The first choral work of large form and classic style, written by an American composer, was the oratorio of "St. Peter," by Prof. John K. Paine of Harvard University. This work was written in 1872–3, and performed at Portland, Me., in June of the latter year. Strict adherence to Biblical text is observed throughout the work, which deals with the establishment of Christianity, as illustrated by the four principal incidents in the life of St. Peter.

Part I. treats of the "Divine Call," the denial, and repentance. It opens with a short orchestral introduction, of which the first half shadows forth the state of darkness in which people existed before the dawn of Christianity, and leads to a majestic chorus, "The time is fulfilled." The scene, which contains a chorus of twelve male voices, "We go before the face of the Lord," interwoven with full chorus, closes with a massive specimen of choral composition, "The Church is built."

The next scene deals with Peter's denial of Jesus, which is thoroughly dramatic in its working out, the alternating accusations of the servants and the denials of Peter being treated with great skill. The chorus, "We hid our Faces from Him," which precedes this incident, is one of great strength and expressiveness.

The second part, "The Ascension; Pentecost," tells the story of the crucifixion in the opening chorus, with power and pathos, closing with a chorale, "Jesus, my Redeemer, lives." The ascension scene is accompanied by graceful recitatives for tenor and bass; and Peter, in a soprano solo, "O Man of God," is told to "put on the whole armor of God and fight the good fight." The scene closes with a beautiful quartet, "Feed the Flock of God."

In the last scene, called "Pentecost," occurs a most effective chorus, "The Voice of the Lord," introduced by a tenor solo describing the miracle of the Pentecost, with a highly colored accompaniment. Peter's solo, "Ye men of Judæa," is both dramatic and descriptive; and the final chorus, "Great and Marvelous," makes a majestic close to the oratorio, which can fairly be ranked with the standard works of its kind.

THE NATIVITY,

a sacred cantata, was composed by Professor Paine for the sixth triennial festival of the Händel and Haydn Society of Boston, in 1883. The text is taken from Milton's "Ode on the Morning of Christ's Nativity." The work begins with a short prelude of graceful form and flowing rhythm, which leads into a chorus, "It was the winter wild," in pastoral style. The account proceeds with a soprano solo and chorus, "But he her fears to cease," which leads into a fiery strongly contrasting chorus, "Nor war nor battle-ground."

"Ring out, ye crystal spheres" is a dignified but stirring movement, of which the second part is a chorus fugato, and leads to the finale, also a chorus fugato. An impressive ending is reached by holding the full chorus on the last chord for seven measures, during which the accompaniment ceases. The tone of the work is dignified and stately in consonance with the lofty character of

Milton's poem, and in the second part there is much pastoral beauty, while the work is thoroughly genial and unforced.

THE LIGHT OF ASIA.

One of the standard American choral works is the "Light of Asia," a cantata by Dudley Buck. The poem used is that by Edwin Arnold, and the work is divided into Part I., the prologue, which contains nine numbers; Part II., the Renunciation, which has eleven numbers; after which comes a chorus, "The Temptation." Part III. has seven numbers, and is followed by the epilogue and finale.

The best numbers are "Enter thrice happy," at the end of the prologue; a duet in canon for soprano and tenor, "Within the bower of inmost splendor"; a semi-chorus and solo, "We are the Voices"; and a seven-part chorus, "Softly the Indian Night."

HORATIO W. PARKER.

The work was performed by the Choral Society of Washington, D.C., for the first time in March, 1889, and it has since been given many times.

PHŒNIX EXPIRANS.

George W. Chadwick's "Phœnix Expirans" is a cantata of which the style is loftily severe, yet affluent in beautiful melody. The words are those of a mediaeval hymn found in Archbishop Trench's collection of sacred Latin poetry. The first performance was given at Springfield, Mass., in 1892; and a second performance, on a larger scale, was given in February, 1893, by the Händel and Haydn Society in Boston.

The work is divided into five numbers, of which the second is for soprano and chorus, and the third a quartet. The other numbers are all for chorus. The music is rich in sumptuous and sensuous harmony, and abounds in entrancing melody. There is distinct individuality in the treatment of both voices and instruments, and the work possesses dramatic intensity, dignity, and impressiveness, and reaches a tremendous climax in the "Fulcite floribus." It is one of the gems of modern composition.

HORA NOVISSIMA,

by Horatio Parker, is perhaps the most dignified and most masterly work of its kind by an American composer. It is set to the words of a Latin hymn, by St. Bernard of Cluny, written in 1145 A.D., a libretto which imposes a difficult task upon the composer because of the monotony of metre.

The poem begins with lamentations over the degradation and corruption of the times, and warnings that the great Judge must soon appear to mete out sentence and retribution. But his tender soul shrinks from the consideration of sin, shame, and punishment, and he turns with trust to the contemplation of the Heavenly City, and of the promises which Christ and his church have made to the upright and steadfast.

This poem is treated in two parts of six and five numbers respectively. Part one opens with a chorus of symmetrical proportions, followed by a quartet for solo voices, "Hic breve vivitur," of fugal form, leading into a superb bass aria, "Spe nodo vivitur" (of which the accent is intricate), and displays a wealth of talent and ability. For about two pages the music flows along quite naturally in bars of various lengths, mostly four and three alternately, and there is nothing forced or labored in it. Another chorus, "Pars mea," opens with a stately introduction, leading to an intricate and well-sustained fugue, led off by the contraltos. "O bona patria" is an air for soprano in 9—8

measure, highly melodious and thoroughly original. A tenor solo, "Urbs Syon aurea," is noticeable for unique accent, in which there is a curious use of triplets and syncopation. A grand double chorus which follows, is full of effective antiphonal touches.

As a whole the work is more remarkable for the choral writing than for the solos. It is a majestic

JOHN K. PAINE.

conception, vigorous and noble in its themes, and complex in its construction. It was written for the Church Choral Society of New York, and first performed by them in the Church of the Holy Trinity, May 3, 1893. Since that time it has been performed twice by the Händel and Haydn Society in Boston, at the Worcester Festival in England and elsewhere.

ST. CHRISTOPHER

is a dramatic oratorio by the same composer, a larger and more varied work than "Hora Novissima," not too closely confined to ecclesiastical style, and with ornate orchestration. The poem is the legend of St. Christopher, recast by the mother of the composer. The work has been performed several times in America, and at the Worcester Festival in England, where it was very favorably received.

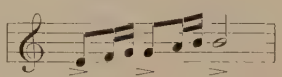
ST. JOHN,

by J. C. D. Parker, is a cantata written for solo voices, chorus, and orchestra. It was composed for and performed at the seventy-fifth anniversary of the Händel and Haydn Society of Boston.

The work is in six movements, each of which, except the last, is introduced by a proclamation of tenors and basses in unison, superimposed upon an orchestral song which reflects the spirit of the scene chosen for illustration. Thus the novel effect is produced of giving to the male chorus in unison the part generally allotted to the narrator. The work is overflowing with charming melody, and is full of variety and fine effects.

THE LIFE OF MAN,

also by J. C. D. Parker, is a larger work than "St. John," consisting of two parts, with twelve divisions, covering the Biblical history of man from the creation to the church triumphant. In this work the composer makes use of the *Leit-motif* to represent sin,



The voice-writing, both in the choruses and concerted numbers, is in many parts both beautiful and effective, and the work is distinguished by a devout and religious spirit.

THE MASS IN E FLAT,

by Mrs. H. H. A. Beach, is not the least important of the sacred works of American composers. Written at a time when the composer was but twenty-two years of age, this work shows much originality, considerable knowledge, and skill in application thereof. The work is scored for full orchestra, with harp and organ, solo voices, and chorus. The mass was first performed by the Händel and Haydn Society in Boston on February 7, 1892.

Henry F. Lahee

BOSTON SYMPHONY ORCHESTRA IN MUSIC HALL, BOSTON.

PRONOUNCING
MUSICAL DICTIONARY

RULES FOR THE PRONUNCIATION OF FRENCH, GERMAN, AND ITALIAN

FRENCH.

VOWELS:

a is pronounced like *a* in Italian, but somewhat shorter, and is often rendered similar to the English ă.
ä like *ah*.
e like *u* in cut.
é like *ay* in day.
è like **e** in where.
ê like *ä* in German.
i or **î** like *ee* in feet. Short **ĭ** is the same as in English.
o as in Italian.
u like *ü* in German.

DIPHTHONGS:

ai as in bait. **ai** before *l*-final or *ll* should be rendered as a diphthong (*ah'-ee*), but slightly separated.
aî and **ei** like *ê*.
eu, eû, and oeu like *ö* in German.
oi like *oh-ăh'*, but so slightly separated that it sounds like one syllable.
ou and **oû** like *oo* in toot.
eau like long *ō* without the vanish *u*.
Vowels and **diphthongs** are rendered nasal when followed by *n*, *m*, *nd*, *nt*, or *mt* at the end of a syllable except in the verbal ending of the third person plural.
Consonants are pronounced the same as in English, except in the following cases:
c the same as *s* in song before *e*, *é*, *è*, *ê*, and *i*.
ch like *sh*.
g has the sound of *z* in azure when placed before *e*, *é*, *è*, *ê*, and *i*.
gn the same as in Italian.
h is often silent.
j like *z* in azure.
ll when placed after **i** is usually rendered like the English *y* (as a consonant), and often prolongs the **i** (like *ee*).
n is nasal and often given the English pronunciation.
m is nasal under certain conditions.
r is rendered with somewhat of a roll.
s-final is silent.
t-final is silent.
er, et, es, est, ez, when used as final syllables, are rendered like *é*.

GENERAL RULE FOR ACCENTUATION:

Lightly accent the last syllable of a polysyllabic word, but do not give any one syllable the strong stress usual in English words.

GERMAN.

VOWELS:

Simple vowels are pronounced the same as in Italian; **y** like *i* or *ü* in German.
Vowels are modified as follows:
ä as in care, but somewhat broader.
ĕ as in fed.
ö has no equivalent in English.
Long **ö** may be rendered by placing the lips to speak *oh*, but saying *ā* instead with the position of the lips unchanged.
Short **ö** is pronounced by saying *ĕ* (as in fed) instead of *ā*.
ü has no equivalent in English.
Long **ü** may be rendered by placing the lips to say *oo* (toot), and saying *ee* (feet) instead..
Short **ü** is pronounced by saying *ĭ* (hit) instead of *ee*.

DIPHTHONGS:

ai and **ei** like long *ī* in write.
ae like *ä*.
au like *ow* in how.
eu and **äu** like *oi* slightly separated (*ah' -ü*).

CONSONANTS:

f, h, k, l, m, n, p, t, the same as in English.
b when beginning a syllable or word is pronounced as in English, but when ending a syllable or word it is rendered like *p*.
d the same as in English, except when ending a syllable or word; in that case it is rendered like *t*.
c like *k* when placed before *a*, *o*, and *u*; like *ts* before *ä*, *e*, *i*, and *ä*.
g is usually hard, but also like *z* in azure in French and Italian words in which *g* is so rendered.
The syllables **ang, eng, ing, ong,** and **ung** when ending a word terminate with a *k* sound.
j like *y* (consonant).
qu like *kv*.
r is rendered either with harsh breathing or a roll.
S when beginning a syllable or word, and also before a vowel, has the sound of *z* (soft); ending a syllable or word, like sharp *s*; placed before **t** and **p,** beginning a word, most frequently like *sh*; otherwise **s** is pronounced as in English.
v like *f*.
w like *v* (between **v** and **w**).
x like *ks*.
z likg *ts*.

COMPOUND CONSONANTS:

ch has no equivalent in English; beginning a syllable, or when placed after e, i, ä, ö, ü, ai, ei, ae, ae, eu, and äu, it is soft (place the tongue to pronounce *d*, but say *h* instead). **ch** is hard when placed after a, o, u, and au.
chs like *x*.
sch like *sh*.
sp and **st**, see **S**.
th like *t*.
Accented syllables are rendered much the same as in English, — with a strong stress.

ITALIAN.

VOWELS:

Vowels being very open are never to be rendered as impure vowels or diphthongs. Vowels are long when ending accented syllables and short in unaccented syllables, or when occurring in accented ones terminating with a consonant.
a pronounced *ah ăh*, but not *ă*.
e like *ay* in day, but without the vanish *ĕ*, as in fed; also has the sound of *a* in care when placed before r.
i has the sound of *ee* in feet; *ĭ* in hit; when before a vowel i has the sound of *y* (consonant).
o like *aw* or *oh*, but without the vanish *ŭ*.
u like *oo* in toot; *u* in full.

CONSONANTS:

All consonants are softer than in English, the soft consonants being quite delicate.
b, d, f, l, m, n, p, qu, s, t, v, are rendered as in English.
c sounds like *k* before a, o, u, or another consonant, with the exception of c, as follows: —
c like *ch* in check before e, or like *ch* in chair before i.
cc is like *t-ch* before e or i.
g is hard when placed before a, o, u, or another consonant, with the exception of l and n.
gl is like *l-y*, and **gn** like ñ in cañon (kan′-yon).
g is like a soft *j* or like *z* in azure when placed before e or i.
h is silent.
j sounds like *y* in you.
r is pronounced with a roll by placing the tip of the tongue against the hard palate.
In a doubled consonant the first syllable is prolonged.
Accented syllables are not so strongly marked as in English, but are much dwelt upon.

PRONOUNCING DICTIONARY OF MUSICAL TERMS

[The diacritical marks used in this vocabulary to designate the pronunciation are those in most common use by philologists, and will be readily understood by the reader.]

A, the sixth note in the natural diatonic scale. (That of C major.)

A, *It.* (äh). At, to, by, in, on, for, with.

A, *Fr.* (ă). To, with, at, on, by.

Ab, *Ger.* (äb). Off, of, from, down.

Abacus, *Lat.* (ă-*bă*-kŭs). An ancient instrument for dividing the intervals of the octave.

A balláta, *It.* (ä bäl-*lä*-tä). In the style of a dance. See *Ballata.*

Abandon, *Fr.* (ă-bänh-dŏnh). Freedom.

Abbandonársi, *It.* (äb-bän-dō-*när*-zē). To abandon oneself to the influence of music.

Abbandonási, *It.* (äb-bän-dō-*nä*-zē). Without restraint.

Abbelláre, *It.* (äb-bĕl-*lä*-rĕ). To embellish with ornaments.

Abcidiren, *Ger.* (äb-sē-*dēr*-'n). A series of exercises in which the names of the notes are used instead of words.

Abbelliménto, *It.* (äb-bĕl-lē-*mān*-tō). An embellishment.

Abblasen, *Ger.* (*äb*-blä-z'n). To sound or flourish the trumpet.

Abendglocke, *Ger.* (ä-bĕnd-*glŏk*-ĕ). Evening bell, curfew.

Abendlied, *Ger.* (*ä*-bĕnd-lēd). Evening-song.

Abendmusik, *Ger.* (ä-bĕnd-*moo*-zĭk). Evening music.

Abendständchen, *Ger.* (ä-bĕnd-*shtānd*-khĕn). A serenade.

Abenteuerlich, *Ger.* (ä-bĕn-*toir*-lĭkh). Bold, strange.

Abgehend, *Ger.* (*äb*-gā-hĕnd). Dying away.

Abgestossen, *Ger.* (*äb*-ghĕ-shtōs-s'n). Short, detached.

Abgeleiteter akkord, *Ger.* (*äb*-ghĕ-lī-tĕ-tĕr äk-kŏrd). An inversion of a chord.

Ab initio, *Lat.* (ăb ĭn-*ē*-shĭ-ō). From the commencement.

Abkürzungen, *Ger.* (*äb*-kürt-soong-ĕn). Abbreviations.

Abnehmend, *Ger.* (*äb*-nā-mĕnd). Softening the tone.

Abrégé, *Fr.* (ă-brā-zhā). To abridge.

Abruptio, *Lat.* (äb-*rŭp*-shĭ-ō). A sudden stop.

Absatz, *Ger.* (*äb*-sätz). A melodic phrase.

Abschwellen, *Ger.* (*äb*-schvĕl-l'n). Diminishing.

Abspielen, *Ger.* (*äb*-shpē-l'n). To perform on an instrument.

Abstimmung, *Ger.* (*äb* shtĭm-moong). Discordance.

Abstossen, *Ger.* (*äb*-stŏs-s'n). To detach. To play staccato.

A cappélla, *It.* (ä käp-*pāl*-lä). In the church or chapel style.

A cappríccio, *It.* (ä käp-*prēt*-shē-ō). In a capricious style.

Accarezzévole, *It.* (äk-kä-rĕt-*zā*-vō-lĕ). Caressing, coaxing.

Accelerándo, *It.* (ät-tshĕl-ä-*rän*-dō). Gradually growing faster.

Accent. Stress or emphasis placed on certain tones.

Accénto, *It.* (ät-*tshān*-tō). Emphasis laid upon certain notes.

Accentuáre, *It.* (ät-tshĕn-too-*ä*-rĕ). To accentuate.

Acciaccáto, *It.* (ät-tshē-äk-*kä*-tō). Violently.

Acciaccatúra, *It.* (ät-tshē-äk-kä-*too*-rä). The same as a short appoggiatura.

Accidental. A sharp, flat or natural not found in the signature.

Accolade, *Fr.* (äk-kō-*lăd'*). A brace connecting two or more staves.

Accompaniment. That part of a musical composition which attends the melody or theme.

Accord, *Fr.* (äk-kŏr). A chord.

Accordáto, *It.* (äk-kŏr-*dä*-tō). In tune.

Accordatúra, *It.* (äk-kŏr-dä-*too*-rä). Concord, harmony.

Accordoir, *Fr.* (äk-kŏr-*dwär*). A tuning instrument.

Accrescéndo, *It.* (äk-krĕ *shān*-dō). Increasing.

Accrescére, *It.* (äk-krĕ *shā*-rĕ). To increase.

A cinq, *Fr.* (ă săn*h*k). For five parts.

Action. The mechanism of an organ or piano.

Ad, *Lat.* (ăd). At, to.

Adágio, *It.* (ä-*dä*-jē-ō). Slow.

Adágio assai, *It.* (ä-dä-jē-ō äs-sä-ē). Very slow.

Adágio cantabile, *It.* (ä-dä-jē-ō kän-tä-*bē*-lā). Slow, in a singing style.

Adágio con gravita, *It.* (ä-dä-jē-ō kŏn *grä*-vē-tä). Slow with gravity.

Adágio di mólto, *It.* (ä-dä-jē-ō dē *mōl*-tō). Very slow.

Adágio non tróppo, *It.* (ä-dä-jē-ō nŏn *trŏp* pō). Not too slow.

Adágio patético, *It.* (ä-dä-jē-ō pä-*tā*-tē-kō). Slow and pathetic.

Adágio pesánte, *It.* (ä-dä-jē-ō pā-*zän*-tĕ). Slow and heavy.

Adágio poi allégro, *It.* (ä-dä-jē-ō pō-ē äl-*lā*-grō). Slow, then quick.

Adágio sostenúto, *It.* (ä-dä-jē-ō sōs-tā-*noo*-tō). Slow and sustained.

Adagíssimo, *It.* (ä-dä-*jēs*-sē-mō). Extremely slow.

Ad captandum, *Lat.* In a light and brilliant style.

Addoloráto, *It.* (äd-dō-lō-*rä*-tō). Grieved.

A deux, *Fr.* (ă-dŭh). For two.

A deux mains, *Fr.* (ă dŭh măn*h*). For two hands.

A deux pianos, *Fr.* (ă dŭh pē-*ä*-nō). For two pianos.

A deux temps, *Fr.* (ă dŭh tän*h*). In double time.

Ad libitum, *Lat.* (ăd *lĭb*-ĭ-tŭm). At will, at pleasure.

Ad placitum, *Lat.* (ăd *plä*-cĭ-tŭm). At pleasure.

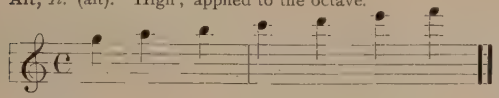
A dúe, *It.* (ä *doo*-ĕ). For two.

A dúe córde, *It.* (ä doo-ĕ *kŏr*-dĕ). For two strings.

A dúe córi, *It.* (ä doo-ĕ *kō*-rē). For two choirs.

A dúe stroménti, *It.* (ä doo-ĕ strō-*mān*-tē). For two instruments.
A dúe vóci, *It.* (ä doo-ĕ *vō*-chē). For two voices.
A dur, *Ger.* (ä door). A major.
Ærophone, *Fr.* (ē-rō-fōn). A French reed instrument.
Affábile, *It.* (äf-*fä*-bē-lĕ). Gracefully, gently
Affanáto, *It.* (äf-fä-*nä*-tō). Uneasily.
Affettuóso, *It.* (äf-fĕt-too-*ō*-zō). Tender.
Affrettándo, *It.* (äf-frĕt-*tän*-dō). Hurrying, quickening the time.
Affrettóso, *It.* (äf-frĕt-*tō*-zō). Quick, accelerated, hurried.
Afinár, *Sp.* (ä-fī-*när*). To tune musical instruments.
Agévole, *It.* (ä-*jā*-vō-lĕ). Light.
Aggiustaménte, *It.* (äd-jĕ-oos-tä-*mān*-tĕ). Without changing the time.
Agilité, *Fr.* (ă-zhē-lē-tā). Nimbleness.
Agilménte, *It.* (ä-jĕl-*mān*-tĕ). Lively, gay.
Agitáto, *It.* (äj-ē-*tä*-tō). Agitated.
A grand chœur, *Fr.* (kür). With full choir.
A grand orchestre, *Fr.* (ŏr-kĕstr). With full orchestra.
Agréments, *Fr.* (ă-grā-mān*h*). Embellishments.
Aigu, *Fr.* (ā-gü). Acute, high, shrill.
Air. Melody, tune.
Air à boire, *Fr.* (ār ă bwär). Drinking-song.
Air chantant, *Fr.* (ār shän*h*-tän*h*). A singing melody.
Air rapide, *Fr.* (ār ră-pēd). A flourish.
Air tendre, *Fr.* (ār tän*h*-dr). Love song.
Air varié, *Fr.* (ār vä-rĭ-ā). Air, with variations.
Ais, *Ger.* (ois). The note A sharp.
Ais-dur, *Ger.* (ois-door). A sharp major.
Ais-moll, *Ger.* (ois mōll). A sharp minor.
Aise, *Fr.* (āiz). Glad, joyful; easy, convenient.
Akkord, *Ger.* (äk-*kōrd*). Chord.
Akt, *Ger.* (äkt). Act.
Al, *It.* (äl). To the, up to the.
A la, *Fr.* (ă lä). In the style of.
A l'abandon, *Fr.* (ă lä-bän*h*-dŏn*h*). With ease.
A la chasse, *Fr.* (ă lä shäss). In the hunting style.
A la même, *Fr.* (ă lä mām). In the same.
A la mésure, *Fr.* (ă lä mā-zür). In time.
A la militaire, *Fr.* (ă lä mē-lē-*tär*). In the military style.
Alborada, *Sp.* (äl-bō-*rä*-dä). The music of a morning serenade.
Alcunó, *It.* (äl-koo-*nō*). Some, certain.
Al fíne, *It.* (äl *fē*-nĕ). To the end.
Alla bréve, *It.* (äl-lä *brā*-vĕ). Time of one breve in a measure.
Alla cáccia, *It.* (*äl*-lä *kät*-tshē-ä). In the hunting style.
Alla cámera, *It.* (*äl*-lä *kä*-mĕ-rä). In chamber music style.
Alla cappélla, *It.* (*äl* lä käp-*pāl*-lä). Vocal chorus without instrumental accompaniment.
Alla dirítta, *It.* (*äl*-lä dē-*rē*-tä). In direct ascending or descending style.
Alla márcia, *It.* (*äl*-lä *mär*-chē-ä). In march style.
Alla modérna, *It.* (*äl*-lä mō *dĕr*-nä). In the modern style.
Alla Morésca, *It.* (*äl*-lä mō-*räs*-kä). In the Moorish style.
All' anticó, *It.* (äl-län-tē-*kō*). In the ancient style.
Alla Palestrína, *It.* (*äl* lä Pä-lĕs-*trē*-nä). In the style of Palestrina (ecclesiastical).
Alla polácca, *It.* (*äl*-lä pō-*läk*-kä). In the style of a polonaise.
Alla quinta, *It.* (*äl*-lä quēn-tä). At the interval of a fifth.
Allargándo, *It.* (äl-lär-*gän*-dō). Growing broader. Slower and more marked.
Alla rivérsa, *It.* (*äl*-lä rē-*vĕr*-sä). In contrary motion.
Alla Tedésca, *It.* (*äl*-lä tĕ-*dās*-kä). In the German style.
Alla Veneziána, *It.* (*äl*-lä vĕ-nā-tsē-*ä*-nä). In the Venetian style.
Alla zíngara, *It.* (*äl*-lä *tsēn*-gä-rä). In gypsy style.
Alla zóppa, *It.* (*äl*-lä *tsŏp*-pä). In a halting style.
Alle, *Ger.* (*äl*-lĕ). All.
Allegraménte, *It.* (äl-lĕ-grä-*mān*-tĕ). Cheerfully, gaily, lightly.
Allegránte, *It.* (äl-lĕ-*grän*-tĕ). Joyous, mirthful.
Allegrettíno, *It.* (äl-lĕ-grĕt-*tē*-nō). A short allegretto. A movement slower than allegretto.
Allegrétto, *It.* (äl-lĕ-*grät*-tō). Lively. Faster than andante and slower than allegro.
Allegrézza, *It.* (äl-lĕ-*grät*-zä). Liveliness.
Allegríssimo, *It.* (äl-lā-*grēs*-sē-mō). As quick as possible.
Allégro, *It.* (äl-*lā*-grō). Quick.
Allégro agitáto, *It.* (äl-*lā*-grō äj-ē-*tä*-tō). Quick and agitated.
Allégro appassionáto, *It.* (äl-*lā*-grō äp-päs-sē ō-*nä*-tō). Passionately joyful.
Allégro assái, *It.* (äl-*lā*-grō äs-*sä*-ē). Faster than allegro.
Allégro cómodo, *It.* (äl-*lā*-grō *kō*-mō-dō). A comfortable degree of speed.
Allégro con brío, *It.* (äl-*lā*-grō kŏn *brē*-ō). Quick, and with spirit.
Allégro con fuóco, *It.* (äl-*lā*-grō kŏn foo-*ō*-kō). Quick and fiery.
Allégro con móto, *It.* (äl-*lā*-grō kŏn *mō*-tō). Quick, with an animated and energetic movement.
Allégro con spírito, *It.* (äl-*lā*-grō kŏn *spē*-rē-tō). Quick, with energy.
Allégro di bravúra, *It.* (äl-*lā*-grō dē brä-*voo*-rä). Quick, with dash.
Allégro di mólto, *It.* (äl-*lā*-grō dē *mŏl*-tō). With much rapidity.
Allégro furióso, *It.* (äl-*lā*-grō foo-rē-*ō*-zō). Fast and furious.
Allégro giústo, *It.* (äl-*lā*-grō *joos*-tō). An appropriate degree of rapidity.
Allégro ma grazióso, *It.* (äl-*lā*-grō mä grä-tse-*ō*-zō). Quick but graceful.
Allégro ma non présto, *It.* (äl-*lā*-grō mä nŏn *prās*-tō). Fast, but not too much so.
Allégro ma non tánto, *It.* (äl-*lā*-grō mä nŏn *tän*-tō). Quick but not too rapid.
Allégro ma non tróppo, *It.* (äl-*lā*-grō mä nŏn *trŏp*-pō). Quick, but not too rapid.
Allégro moderáto, *It.* (äl-*lā*-grō mŏd-ĕ-*rä*-tō). Moderately fast.
Allégro mólto, *It.* (äl-*lā*-grō *mōl*-tō). Very fast.
Allégro risolúto, *It.* (äl-*lā*-grō rē-zō-*loo*-tō). Quick and resolute.
Allégro velóce, *It.* (äl-*lā*-grō vĕ-*lō*-chĕ Quick and swift.
Allégro viváce, *It.* (äl-*lā*-grō vē-*vä*-chē). Quick and spirited.
Allégro vívo, *It.* (äl-*lā*-grō *vē*-vō). Quick and lively.
Allegrúsio, *It.* (äl-lĕ-*groo*-zē-ō). Good-humored, sprightly.
Allein, *Ger.* (äl-*līn*). Alone, only.
Alleinsang, *Ger.* (äl-*līn*-säng). A solo.
Allentaménto, *It.* (äl-lĕn-tä-*mān*-tō). Slackening.

All 'ottáva, *It.* (äl ŏt-*tä*-vä). An octave above or below.
All 'unisóno, *It.* (äl' oo-nē-*zō*-nō). In unison.
Al piacére, *It.* (äl pē-ä-*chā*-rĕ). At pleasure.
Al piu, *It.* (äl pē-oo). The most.
Al rigóre del témpo, *It.* (äl rē-*gō*-rĕ dĕl *tām*-pō). In strict time.
Al rivérso, *It.* (äl rē-*vâr*-sō). In contrary motion.
Al segno, *It.* (ä' *sān*-yō). To the sign 𝄋. See Segno.
Alt, *Ger.* (ält). Alto.
Alt, *It.* (ält). High; applied to the octave.



Alterézza, *It.* (äl-tā-*rĕts*-tsä). Loftiness, sublimity.
Altíssimo, *It.* (äl-*tēs*-sē-mō). Octave above Alt.
Alto. The deeper of the two chief divisions of women's or boys' voices.
Altus, *Lat.* (*ăl*-tŭs). The alto or counter tenor.
Amábile, *It.* (ä-*mä*-bē-lĕ). Sweet, tender, gentle.
Amarévole, *It.* (ä-mä-*rā*-vō-lĕ). Mournfully.
Amóre, *It.* (ä-*mō*-rĕ). Love.
Amore, con. Fondly, tenderly.
Amoróso, *It.* (ä-mō-*rō*-zō). Loving, tender.
Anche, *Fr.* (änsh). Reed.
Anche, *It.* (än-kā). Also, likewise, too, even.
Andacht, *Ger.* (*än*-däkht). Devotion.
Andánte, *It.* (än-*dän*-tĕ). A moderately slow movement.
Andante affettuóso, *It.* (än *dän*-tĕ äf-fĕt-too-*ō*-zō). Slowly and tenderly.
Andante cantábile, *It.* (än-dän-tĕ cän-*tä*-bē-lĕ). Slow, in a singing manner.
Andante con móto, *It.* (än-*dän*-tĕ kŏn *mō*-tō). Slow, with movement.
Andante grazióso, *It.* (än-*dän*-tĕ grä-tsē-*ō*-zŏ). Slow and graceful.
Andante lárgo, *It.* (än-dän-tĕ *lär*-gō). Slow, distinct.
Andante maestóso, *It.* (än-*dän*-tĕ mä-ĕs-*tō*-zo). Slow and majestic.
Andante ma non tróppo, *It.* (än-*dän*-tĕ mä nŏn *trŏp*-pō). Slow, but not too much so.
Andantíno, *It.* (än-dän-*tē*-nō). Strictly meaning slower than andante, but used often in the reverse sense.
Anfang, *Ger.* (*än*-fäng). Beginning.
Anführer, *Ger.* (*än*-füh-rĕr). A conductor, director, leader.
Angemessen, *Ger.* (än-ghĕ-*mĕs*-s'n). Appropriate.
Angoscióso, *It.* (än-gŏs-chē-*ō*-zō). Plaintively.
Angstlich, *Ger.* (*ängst*-lĭkh). Fearfully.
Anhang, *Ger.* (*än*-häng). Coda.
Anima, *It.* (*än*-ē-mä). Life.
Animáto, *It.* (än-ē-*mä*-tō). Animated.
Animóso, *It.* (än-ē *mō*-zō). Spirited.
Anklang, *Ger.* (*än*-kläng). Harmony.
Anlage, *Ger.* (*än*-lä-ghĕ). The plan of a composition.
Antecedent. The initial phrase of a melody, requiring to be followed by another called its consequent.
Antiphone, *Gr.* (*ăn*-tĕ-fō-nĕ). Responsive singing.
Antithesis. A term used to indicate the last half of a musical period, also the answer in a figure.
Anwachsend, *Ger.* (*än*-väkh-sĕnd). Increasing.
A piacére, *It.* (ä pē-ä-*chā*-rĕ). At pleasure.
A póco, *It.* (ä-*pō*-kō). By little.
Appassionáto, *It.* (äp-päs-sē-ō-*nä*-tō). Impassioned.
Appoggiatúra, *It.* (äp-pŏd-jē-ä-*tōo*-rä). The accented appoggiatura is a grace note placed before the real melody-note and taking the accent and part of the latter's time value. The long appoggiatura is now obsolete. The short appoggiatura is a small eighth-note or sixteenth-note having a slanting stroke through the hook, and is played as rapidly as possible.
A quatre mains, *Fr.* (ä kätr măn*h*). For four hands.
A quatre seuls, *Fr.* (ä kätr sŭl). For four soloists.
A quatre voix, *Fr.* (ä kätr vwä). For four voices.
Arche, *Ger.* (*är*-khĕ). Sounding-board of an organ.
Arco, *It.* (*är*-kō). Bow.
Ardíto, *It.* (är-*dē*-tō). Spirited, bold.
Aria, *It.* (*ä*-rē-ä). Air, melody.
Ariétta, *It.* (ä-rē-*ĕt*-tä). A short aria.
Ariette, *Fr.* (ä-rē-ĕt). A long aria.
Arióso, *It.* (ä-rē-*ō*-zō). A style betweeen the aria and recitative. In instrumental music this term has the same meaning as cantabile.
Arpa, *It.* (*är*-pä). Harp.
Arpège, *Fr.* (är-pāzh). Breaking a chord.
Arpeggio, *It.* (är-pād-jē-ō). A broken chord.
Arsis, *Gk.* (*är*-sĭs). Up-beat.
As, *Ger.* (äs). The note A flat.
As dur, *Ger.* (äs door). The key of A-flat major.
As moll, *Ger.* (äs mōll). The key of A-flat minor.
Assái, *It.* (äs-*sä*-ē). Rather, very.
Assai piu, *It.* (äs-*sä*-ē *pē*-oo). Much more.
Assez, *Fr.* (ăs-sā). Rather.
A témpo, *It.* (ä *tĕm*-pō). In time.
A tre córde, *It.* (ä trā *kōr*-dĕ). For three strings.
A tre vóci, *It.* (ä trā *vō*-chē). For three voices.
Attácca, *It.* (ät-*tăk*-kä). Begin what follows without pausing.
Aufgeweckt, *Ger.* (*owf*-gā-vĕkht). Agitated.
Aufhalten, *Ger.* (*owf*-häl-t'n). To suspend.
Aufschwung, *Ger.* (*owf*-schvoongk). Soaring impetuosity.
Auftritt, *Ger.* (*owf*-trĭt). Scene.
Ausdruck, *Ger.* (*ows*-drook). Expression.
Aushalten, *Ger.* (*ows*-häl-t'n). To sustain.
Ausstimmen, *Ger.* (*ows*-shtĭm-mĕn). To tune thoroughly.
Authentic cadence. The dominant triad followed by the tonic.
Avec, *Fr.* (ä-vĕk). With.
A vide, *Fr.* (ä vēd). Open.
A volonte, *Fr.* (ä vō-lŏn*h*-tā). At will.

B. The seventh note of the natural diatonic scale. The Germans call B, "H."
Bacás, *Sp.* (bä-*käs*). Quick tune on the guitar.
Badinage, *Fr.* (băd-ī-*näzh*). Playfulness.
Bagatelle, *Fr.* (băg-ä-*tĕl'*). A trifle.
Baguette, *Fr.* (bă-*ghĕt*). A drum-stick. A violin-stick.
Bal, *Fr.* (băl). Ball.
Baldaménte, *It.* (bäl-dä-*mān*-tĕ). Boldly.
Bar. A vertical line dividing measures on the staff.
Barytone. The male voice intermediate between bass and tenor. Also a name given to the euphonium.
Bass. The lowest male voice. The lowest part of a musical composition. Also a term used in place of contra-bass.

Bass-clef. F-clef on the fourth line.

Basso, *It.* (*bäs*-sō). A term used at times in place of bass.

Básso cantánte, *It.* (*bäs*-sō kän-*tän*-tĕ). Vocal bass.

Básso contínuo, *It.* (*bäs*-sō kŏn-*tē*-noo-ō). Thorough bass.

Baton. A stick used by conductors in beating time.

Bauernlied, *Ger.* (*bow*-ĕrn-lēd). A rustic ballad.

Beat. The motion of the hand or foot in marking time.

Bedeckt, *Ger.* (bā-*dĕkt*). Stopped.

Begleiten, *Ger.* (bĕ-*glī*-t'n). To accompany.

Begleitung, *Ger.* (bĕ-*glī*-toongk). An accompaniment.

Beispiel, *Ger.* (*bī*-spēl). An example.

Belebt, *Ger.* (bĕ-lĕbt). Animated.

Bémol, *Fr.* (bā-mŏl). A term used to denote b flat (♭).

Ben, *It.* (bān). Well; very.

Berceuse, *Fr.* (bĕr-süss). A cradle-song.

Bes, *Ger.* (bĕs). The note B double flat.

Bestimmt, *Ger.* (bĕs-*tĭmt*). Decided.

Betont, *Ger.* (bĕ-*tōnt*). Accented.

Bewegt, *Ger.* (bĕ-*vāgt*). Agitated.

Bien chanté, *Fr.* (bēyăn*h* chän*h*-tā). Molte cantabile.

Bis, *Lat.* (bĭs). Twice.

Bizzáro, *It.* (bēt-*tsär*-rō). Fantastical.

Blase-instruménte, *Ger.* (*blä*-zĕ ĭn-stroo-*mĕn*-tĕ). Wind instruments.

Blech-instruménte, *Ger.* (blĕkh-ĭn-stroo-*mĕn*-tĕ). Brass instruments.

B mol, *Fr.* (bā mōl). The note B flat.

B moll, *Ger.* (bā mōl). The key of B-flat minor.

Bogen, *Ger.* (*bō*-g'n). Bow, slur, or tie.

Bourdonnement, *Fr.* (boor-dŏn-mŏn*h*). Humming, singing.

Bourré, *Fr.* (boo-rā). An old dance of Spanish or French origin.

Brace. The sign { used to connect two or more staves.

Branle, *Fr.* (brän*h*-lĕ). An old French dance in 4-4 time.

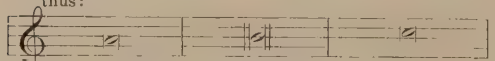
Bratsche, *Ger.* (*brä*-tschĕ). The viola.

Braut-lied, *Ger.* (*browt*-lēd). Bridal song.

Bravúra, *It.* (brä-*voo*-rä). Dash, brilliancy.

Breit, *Ger.* (brīt). Stately, slow.

Breve. The longest note used in modern music; it is equal to eight quarter beats or two whole notes. It is written thus:



Brillánte, *It.* (brēl-*län*-tĕ). Brilliant.

Brindisi, *It.* (brēn-*dē*-zē). Drinking-song.

Brío, *It.* (*brē*-ō). Spirit, fire.

Búffa, *It.* (*boof*-fä). Comic.

Buona nota, *It.* (bwō-nä nō-tā). Accented note.

Búrla, *It.* (*boor*-lä). A jest.

Burlésco, *It.* (boor-*lās*-kō). Burlesque.

C. The first note of the natural diatonic scale.

Cachúcha, *Sp.* (kä-*tchoo*-tchä). A popular Spanish dance.

Cadence. A close, an ending.

Cadénza, *It.* (kä-*dān*-tsä). That part of a vocal or instrumental solo intended to display the technical ability of the soloist.

Caisse, *Fr.* (kāss). A drum.

Calándo, *It.* (kä-*län*-dō). Decreasing.

Calcándo, *It.* (käl-*kän*-dō). Increasing.

Calma, *It.* (*käl*-mä). Calm.

Calóre, *It.* (kä-*lō*-rĕ). Warmth.

Canon. A kind of composition in which two or more parts take up in succession the same melody or subject.

Cantábile, *It.* (kän-*tä*-bē-lĕ). In a singing style.

Cantándo, *It.* (kän-*tän*-dō). In a singing style.

Cantiléna, *It.* (kän-tĭ-*lā*-nä). A ballad or popular song. In instrumental music the term is used to indicate a flowing, song-like character.

Cánto, *It.* (*kän*-tō). Song; the highest vocal or instrumental part.

Cánto clef. The C clef when placed on the first line.

Cánto cromático, *It.* (*kän*-to krō-*mä*-tē-kō). Singing in semitones.

Cánto férmo, *It.* (*kän*-tō *fár*-mō). A melody given as a subject for contrapuntal treatment.

Cánto figuráto, *It.* (*kän*-tō fē-goo *rä*-tō). A figured melody.

Cánto funébre, *It.* (*kän*-tō foo-*nā*-brĕ). A funeral song.

Cánto Gregoriáno, *It.* (*kän*-tō grĕ-gō-rē-*ä*-nō). The Gregorian chant.

Cánto necessário, *It.* (*kän*-tō nā-chĕs-sä-rē-ō). A term which indicates the parts that are to sing through the piece.

Cánto prímo, *It.* (*kän*-to *prē*-mō). The first treble or soprano.

Cantór, *It.* (kän-*tōr*). A precentor.

Cantríce, *It.* (kän-*trē*-chĕ). A female singer.

Cantus, *Lat.* (*kăn*-tŭs). A melody.

Canzóna, *It.* (kän-*tsō*-nä). Song, ballad, canzonet.

Capelle, *Ger.* (kä-*pĕl*-lĕ). An orchestra.

Capélla alla, *It.* (käp-*pĕl*-lä äl-lä). In church style.

Capellmeister, *Ger.* (*kä*-pĕl-*mīs*-tĕr). Choir-master; conductor of an orchestra.

Capo, *It.* (*kä*-pō). Beginning or head.

Capríccio, *It.* (kä-*prēt*-chē-ō). A composition written in a capricious style.

Carezzevóle, *It.* (kä-rĕt-tsā-*vō*-lā). Soothingly.

Carillon, *Fr.* (kä-rē-yŏn*h*). Chime.

Caríta, *It.* (kä-*rē*-tä). Feeling.

Carmen, *Ger.* (*kär*-mĕn). A song, a tune.

Carol. A name given to songs of praise, joy, and exultation. Of such character are the songs which celebrate Christmas and Easter.

Cássa, *It.* (*käs*-sä). A bass drum.

Cavatína, *It.* (kä-vä-*tē*-nä). A short song. The term is frequently used by opera composers to indicate a vocal air of less extent than the aria, and with little or no embellishment.

Caxa, *Sp.* (käx-ä). A drum.

Cédez, *Fr.* (sā-dā). Decrescendo; also to follow the voice.

Célere, *It.* (*chā*-lĕ-rā). Rapid.

Céleste, *Fr.* (sā-*lĕst*). Celestial, heavenly.

Celestína, *It.* (chā-lĕs-*tē*-nä). An organ stop.

Cento. A composition formed by selections from one composer's works.

Ces, *Ger.* (tsĕs). C ♭.

Cetra, *It.* (*chā*-trä). A small harp.

Chaconne. An instrumental composition in $\frac{3}{4}$ time and slow tempo, usually founded on a ground bass.

Chamade, *Fr.* (shä *mäd*). Signal for a parley or surrender by beat of drum.

Chamber-music. Vocal or instrumental compositions whose nature renders them more suitable for performance in a

room or small hall than in halls of large dimension. Under this head are placed sonatas for one or more instruments, songs, string-quartets, etc.

Chanson, *Fr.* (shän*h*-sŏn*h*). A song.

Chansonnette, *Fr.* (shän*h*-sŏn-*nĕt*). A short song.

Chant de noël, *Fr.* (shän*h* dŭh nō ĕl). A Christmas carol.

Characterstucke, *Ger.* (*kä*-räc-tĕr shtück-ĕ). A name given to short instrumental compositions of a descriptive style.

Chef, *Fr.* (shĕf). Chief.

Chest-register. The lower register of the voice.

Chest tones. } The lowest register of the voice.
Chest voice. }

Chest, wind. A reservoir in an organ for holding air.

Chiáro, *It.* (kē-*ä*-rō). Clear, brilliant tone.

Chiáve, *It.* (kē-*ä*-vā). A clef, or key.

Chevrotement, *Fr.* (shĕ-vrōt-mŏn*h*). A tremor or shake in singing.

Choeur, *Fr.* (kuhr). Choir, chorus.

Chor, *Ger.* (kōr). Chorus.

Choral. An early German Protestant church hymn-tune, or a hymn-tune of that style.

Chord. Two or more tones of different pitch united according to the laws of harmony.

Chorus. A body of singers; also a composition written for them.

Chroma, *Gr.* (*krō*-mä). The chromatic signs

Chromatic. Proceeding by semitones; also relating to those tones that are foreign to a given key.

Cinq, *Fr.* (săn*h*k). Five.

Cinque-pace. An old dance having a five-step movement.

Cis, *Ger.* (tsĭs). C ♯.

Clarus, *Lat.* (*klä*-rŭs). Loud, clear, bright.

Clave, *Lat.* (*klä*-vĕ). A key; a cleft.

Clavier, *Ger.* (klä-*fēr*). The pianoforte.

Clavis, *Lat.* (*klä*-vĭs). A key; a clef.

Clef. A character placed at the head of the staff to indicate the position of one note, and thereby that of the remaining notes.

C major. The diatonic scale, or key of C, without flats or sharps.

C minor. The diatonic scale, or key of C, with the third and sixth flatted.

C moll, *Ger.* (tsā mŏll). The key of C minor.

C natural. C without flat or sharp.

Códa, *It.* (*kō*-dä). A few measures added to the end of a piece of music.

Códa brillánte, *It.* (*kō*-dä brēl-*län*-tĕ). A brilliant termination.

Col, *It.* (kŏll). With the.

Col básso, *It.* (kŏl *bäs*-sō). With the bass.

Col cánto, *It.* (kŏl *kän*-tō). With the melody or voice.

Colla sinístra, *It.* (kŏl-lä sē-*nēs*-trä). With the left hand.

Colla vóce, *It.* (kŏl-lä *vō*-chĕ). With the voice. The accompanist to take the time from the singer.

Coll' ottáva, *It.* (kŏl-l' ōt-*tä*-vä). To be played in octaves.

Coloratúra, *It.* (kō-lō-rä *too*-rä). Runs, passages, trills, adding brilliancy to a vocal or instrumental composition.

Cóme, *It.* (*kō*-mĕ). As, like.

Cóme príma, *It.* (*kō*-mĕ *prē*-mä). As at first.

Cóme súpra, *It.* (*kō*-mĕ *sō* prä). As above.

Cóme sta, *It.* (*kō*-mĕ stä). As it stands. Perform exactly as written.

Common time. Double or quadruple time.

Common turn. A turn consisting of a principal note, the note above it, and the note below.

Compass. The range of notes of which any voice or instrument is capable.

Complésso, *It.* (kŏm *plās*-sō). A term applied to a chord which is complete.

Compound intervals. Those which exceed the extent of an octave.

Con, *It.* (kŏn). With.

Con abandóno, *It.* (kŏn ä bän-*dō* nō). With passion, with ardent feeling.

Con ánimo, *It.* (kŏn *än*-ē-mō). With animation.

Concénto, *It.* (kŏn-*chān*-tō). Concord. Harmony of voices and instruments.

Concerted music. Compositions written for several voices or instruments.

Concert-master. The leading first violinist of an orchestra.

Concerto. A composition of length for a solo instrument with orchestral accompaniment, generally in symphonic form, but with three movements.

Concertstück, *Ger.* (kŏn-*tsĕrt* shtück). A concert-piece.

Concomitant sounds. Accessory sounds.

Conductor. One who drills and conducts an orchestra or chorus.

Consolánte, *It.* (kŏn-sō-*län*-tĕ). Consoling.

Conterá, *Sp.* (kōn-tā-*rä*). Prelude.

Contra bass. A double bass.

Contralto. (See Alto.) In Germany the term is some times used to indicate the lower alto voice.

Cor, *Fr.* (kŏr). A horn.

Córchea, *Sp.* (*kōr*-kā-ä). A crotchet.

Córda, *It.* (*kŏr*-dä). A string.

Córno, *It.* (*kŏr*-nō). A horn.

Córo, *It.* (*kō*-rō). Chorus.

Counterpoint. The art of combining two or more melodies according to the laws which govern polyphonic composition.

Counter tenor. High tenor. The highest male voice.

Crescéndo, *It.* (krĕ-*shan*-dō). Increasing the volume of sound.

Crómmo, *It.* (*krōm*-mō). A choral dirge.

Crotchet. A quarter-note.

Cue. Music inserted in small notes just before the entrance of a voice or instrument in concerted music to suggest the entrance of that part.

Cum cántu, *Lat.* (kŭm *kăn*-tū). With song.

D. The second note of the natural diatonic scale.

Da, *It.* (dä). By, for, from, of.

Da cápo, *It.* (dä *kä*-pō). From the beginning.

Da cápo al fine, *It.* (dä *kä*-pō äl *fē*-nĕ). From the beginning to the end.

Da cápo al ségno, *It.* (dä-*kä*-pō äl *sān*-yō). From the beginning to the sign 𝄋.

Da cápo senza repetizióne, *It.* (dä *kä*-pō sän-tsä rā-pā-tē-tsē-*ō*-nĕ). From the beginning without repetition.

Dagli, *It.* (däl-yē).
Dai, *It.* (dä-ē).
Dal, *It.* (däl).
Dall', *It.* (däll').
Dalla, *It.* (*dăl*-lä).
Dalle, *It.* (*dăl*-lā).
Dallo, *It.* (*dăl*-lō).
} To the, by the, from the, for the.

Dal ségno, *It.* (däl *sān*-yō). From the sign 𝄋. (See Segno.)
Dämpfer, *Ger.* (*dām*-pfĕr). A damper, or mute.
Da scherzo, *It.* (dä *skārt*-sō). Lively, playful.
Decánto, *Lat.* (dā-*kăn*-tō). To sing, to chant.
Décidé, *Fr.* (dā-*sē*-dā). Decided.
Decíso, *It.* (dā-*chē*-zō). Decided, energetic.
Declamándo, *It.* (dĕk-lä-*män*-dō). In declamatory style.
Décomposé, *Fr.* (dā-kŏm-*pō*-zā). Disconnected.
Decrescéndo, *It.* (dā-krĕ-*shān*-dō). Decreasing the volume of sound.
Deficiéndo, *It.* (dā-fē-chē-*ān*-dō). Dying away.
Degli, *It.* (dāl-yē). Of the; than the.
Degree. Any tone of a major or minor scale.
Dei, *It.* (dā-ē). Of the; than the.
Del', *It.* (dāl).
Dell', *It.* (dāll').
Della, *It.* (*dăl*-lä).
Delle, *It.* (*dăl*-lĕ).
Dello, *It.* (*dăl*-lō).
} Of the; than the.

Deliberáto, *It.* (dĕ-lē-bā-*rä*-tō). Deliberate.
Delicáto, *It.* (dĕl-ē-*kä*-tō). In a delicate style.
Delirío, *It.* (dĕ-*lē*-rē-ō). Frenzy.
Deliziosaménte, *It.* (dĕ-lē-tsē-ō-zä-*mān*-tĕ). Deliciously, sweetly.
Demi, *Fr.* (dĕ-*mē*). Half.
Depression. The lowering of a tone.
Des, *Ger.* (dĕs). D ♭.
Desidério, *It.* (dā-sē-*dā*-rē-ō). Desire, longing.
Désto, *It.* (*dās*-tō). Sprightly.
Déstra, *It.* (*dās*-trä). Right.
Détaché, *Fr.* (dā-tä-shā). Detached, staccato.
Deux, *Fr.* (dü). Two.
Devóto, *It.* (dā-*vō*-tō). In a devotional style.
Dextra, *Lat.* (*dĕx*-trä). Right.
Di, *It.* (dē). Of, from, to.
Diatonic. A term used to describe the tones of the major or minor scale.
Di chiáro, *It.* (dē kē-*ä*-rō). Clearly.
Di cólto, *It.* (dē *kōl*-tō). At once.
Difficile, *It.* (dēf-*fē*-chē-lĕ). Difficult.
Di gála, *It.* (dē *gä*-lä). Merrily.
Diluéndo, *It.* (dē-lōo-*ăn*-dō). Dying away.
Diminuéndo, *It.* (dē-mē-noo-*ăn*-dō). Diminishing in loudness.
Di nuóvo, *It.* (dē noo-*ō*-vō). Again, anew.
Dis, *Ger.* (dēz). D ♯.
Discant. The treble or soprano voice.
Disinvólto, *It.* (dēz-ēn-*vōl*-tō). Free, graceful.
Distínto, *It.* (dēs-*tēn*-tō). Distinct.
Divísi, *It.* (dē-*vē*-zē). Divided.
Divóto, *It.* (dē-*vō*-tō). Devoutly.
Do. The Italian name for C. It is also the name of the first degree of any scale.
Dólce, *It.* (*dōl*-chĕ). Sweet, soft.
Dolénte, *It.* (dō-*lān*-tĕ). Plaintive, sad.
Dolóre, *It.* (dō-*lō*-rĕ). Grief.
Doloróso, *It.* (dō-lō-*rō*-zō). Sorrowful.
Dominant. The fifth note in the scale.
Donner une serenade, *Fr.* (dŏn-nā ün sĕr-ĕn-*ăd'*). To serenade.
Dópo, *It.* (*dō*-pō). After.
Doppel, *Ger.* (*dŏp*-p'l). Double.
Doppio, *It.* (*dŏp*-pē-ō). Double.
Dóppio moviménto, *It.* (*dŏp*-pē-ō mō-vē-*mān*-tō). Twice as fast.
Double. An obsolete term for variation.
Doucement, *Fr.* (*doos*-mänh). Gently, softly.
Doux, *Fr.* (doo). Gentle, soft.
Doux mais soutenu, *Fr.* (doo mā *soo*-tĕ-nü). Soft but sustained.
Drängend, *Ger.* (*drān*-gĕnd). Hurrying, hastening.
Drei, *Ger.* (drī). Three.
Dreiklang, *Ger.* (*drī*-kläng). Three tones, a triad.
Dreist, *Ger.* (drīst). Bold.
Dreigstigkeit, *Ger.* (*drīs*-tĭg-kīt). Boldness.
Dreistimmig, *Ger.* (*drīs*-tĭm-mĭg). For three parts, or voices.
Drohne, *Ger.* (*drō*-nĕ). A heavy tone. A drone.
Droit (e), *Fr.* (drwä). Right.
Due, *It.* (doo-ĕ). Two.
Dulcet. Soft.
Dumph, *Ger.* (doomph). Of a dull, hollow sound.
Duolo, *It.* (*dwō*-lō). Sadness, melancholy.
Duple. Double.
Double rhythm. Rhythm of two beats to a measure.
Dur, *Ger.* (door). Major.
Durále, *It.* (doo-*rä*-lĕ). Harsh.
Duraménte, *It.* (doo-rä-*mān*-tĕ). Harshly.
Durch, *Ger.* (doorkh). Through.
Durchführung, *Ger.* (*doorkh*-fü-roongk). The development of a theme.
Düster, *Ger.* (düs-tĕr). Gloomy.
Dux, *Lat.* (dŭx). The subject or theme of a fugue.

E. The third tone in the natural diatonic scale.
E, *It.* And.
Ebolliménto, *It.* (ā-bŏl-lē-*mān*-tō). A sudden and impassioned display of emotion.
Eccheggiánte, *It.* (ĕk-kād-jē-*ăn*-tĕ). Echoing, resounding.
Eclat, *Fr.* (ā-*klä*). Same as Brio.
Ed, *It.* (ād). And.
Egalité, *Fr.* (ā-*găl*-ē-tā). Evenness, smoothness.
Eilen, *Ger.* (ī-l'n). To hasten.
Eilig, *Ger.* (ī-lĭg). In a hurried style.
Ein, Eins, *Ger.* (īn, īns). One.
Einfach, *Ger.* (*īn*-fäkh). Simple.
Einhalten, *Ger.* (*īn*-häl-t'n). To pause.
Einleitung, *Ger.* (*īn*-lī-toongk). Introduction.
Einschlafen, *Ger.* (*īn*-shlä-f'n). To die away.
Eis, *Ger.* (īs). E ♯.
Elégante, *Fr. and It.* (ĕl-ā-*gănt*-tĕ). Elegant, graceful.
Elegánza, *It.* (ĕl-ā-*gän*-tsä). Elegance.
Elégo, *Sp.* (ĕl-*ā*-gō). Plaintive.
Eleváto, *It.* (ĕl-ĕ *vä* tō). Lofty, sublime.
Emérillonné, *Fr.* (ā mā-rīl-*yŏn*-nā). Brisk, lively.

Empâter les sons, *Fr.* (änh-pä-tā lā sŏnh). To produce a very smooth and suave legato.

Empfindungsvoll, *Ger.* (ĕmp-*fĭn*-doongs-fŏl). With emotion.

Emphatique, *Fr.* (änh-fä-*tēk*). Emphatic.

Emporté, *Fr.* (änh-pŏr-tā). Carried away by feeling.

Empressé, *Fr.* (änh-prĕs sā). Eager, in haste.

En élargissant, *Fr.* (än ā-lär-zhĭs-sanh). Same as allargando.

Enérgia, *It.* (ĕn-*ār*-jē-ä). Energy.

Enérgico, *It.* (ĕn-*ār*-jē-kō). Vigorous.

Enfási, *It.* (ĕn-*fä*-zē). Emphatic.

Enfler, *Fr.* (änh-*flā*). To increase the tone.

Engführung, *Ger.* (ĕng-*fūh*-roongk). The stretto in a fugue.

Enharmonic. A term used to indicate a change in name, but not in pitch of any tone, interval, chord, or scale. Thus, for example, the note C may be named B♯ or D♭♭.

Enjoué, *Fr.* (änh-zhoo-ā). Cheerful, gay.

Ensemble music. Concerted music. Music intended for more than one performer.

En serrant, *Fr.* (anh sĕr-ranh). Pressing.

Entr'acte, *Fr.* (änh-tr' äkt). Music intended for performance between the acts of an opera or play.

Entschlafen, *Ger.* (ĕnt-*shlä*-f'n). Diminuendo.

Entschlossen, *Ger.* (ĕnt-*shlŏs*-s'n). In a determined manner.

En voz, *Sp.* (ĕn vōth). In voice.

E poi, *It.* (ā pō ē). And then.

Equábile, *It.* (ĕ-*quä*-bē-lĕ). Equal, smooth.

Erfreulich, *Ger.* (ĕr-froi-lik*h*). Joyful.

Ergriffen, *Ger.* (ĕr-*grĭf*-f'n). Affected, stirred.

Erhaben, *Ger.* (ĕr-*hä*-b'n). Lofty, sublime.

Ermunterung, *Ger.* (ĕr-*moon*-tĕ-roongk). Animation.

Ernst, *Ger.* (ĕrnst). Earnest, serious, grave.

Eróico, *It.* (ĕr-*ō*-ĭ-kō). Heroic.

Erotic. Amatory. A love-song.

Erst, *Ger.* (ĕrst). First.

Ersterben, *Ger.* (ĕr *shtĕr*-b'n.) To die away.

Erweckung, *Ger.* (ĕr *vĕk*-oongk). Awakening, animation.

Es, *Ger.* (ās). E♭.

Esátto, *It.* (ĕz-*ät*-tō). Exact, true.

Esempio, *It.* (ĕz-*ām*-pē-ō). Example.

Eses, *Ger.* (ās-ās). E♭♭.

Esitaménto, *It.* (ĕz-ē-tä-*mān*-tō). Hesitation.

Esonáre, *It.* (ĕz-ŏr-*nä*-rĕ). To adorn.

Espirando, *It.* (ĕs-pē-*rän*-dō). Expiring, dying away.

Espressióne, *It.* (ĕs-prās-sē-*ō*-nĕ). Expression.

Espressívo, *It.* (ĕs-prās-*sē*-vō). Expressive.

Estinguendo, *It.* (ĕs-tēn-*guān*-dō). Dying away.

Estínto, *It.* (ĕs *tēn*-tō). Hardly audible.

Estrinciéndo, *It.* (ĕs-trēn-chē-*ān*-dō). Playing with decision.

Estriniénda, *It.* (ĕs-trē-nē-*ān*-dä). Very legato.

Et, *Lat.* and *Fr.* And.

Eteinte, *Fr.* (ā-tănh*t*). Died away.

Etendre, *Fr.* (ā-tänhdr). To extend.

Etouffé, *Fr.* (ā-toof-fā). Stifled, muffled.

Etwas, *Ger.* (*ĕt*-väs). Somewhat, rather.

Eutímia, *It.* (yoo-*tē*-mē-ä). Vivacity.

Eveillé, *Fr.* (ā-vā-yā). Lively.

Exposition. Development.

Expressif, *Fr.* (ĕx-prĕs-*sĕf*). Expressive.

F. The fourth tone in the natural diatonic scale.

Fa. The syllable used for the note F in the "fixed do" system of notation; it is also the name of the fourth degree of the diatonic scale.

Fabélla, *Lat.* (fä-*bĕl*-lä). An interlude.

Facile, *Fr.* (fä-*sēl*) and *It.* (fä-*chē*-lĕ). Easy.

Facilità, *It.* (fä-chēl-ē-tä). } Facility.
Facilité, *Fr.* (fä-se-lē-*tä*). }

Faible, *Fr.* (*fā*-bl). Weak.

Faire, *Fr.* (fār). To execute.

Falsétto, *It.* (fäl-*sĕt*-tō). The highest register of a voice.

Fanfare. A flourish of trumpets or a trumpet-call. The term is also used as the title of an instrumental composition composed in the style of the above.

Fantastico, *It.* (fän-*täs*-tē-kō). } Fantastic. In a fantastic manner.
Fastástique, *Fr.* (fän-täs-*tēk*). }
Fantastisch, *Ger.* (fän-*täs*-tĭsh). }

Farandole, *Fr.* (fä-rän*h*-*dōl*). A lively dance of Southern France in 6-8 time.

Fastóso, *It.* (fäs-*tō*-zō). Pompous.

Feier, *Ger.* (*fī*-ĕr). Festival.

Feier-gesang, *Ger.* (*fī*-ĕr-ghĕ-*sängh*). Festival hymn.

Feierlich, *Ger.* (*fī*-ĕr-lĭkh). Festive, solemn.

Fein, *Ger.* (fīn). Delicate, refined.

Fermaménte, *It.* (fâr-mä-*mān*-tĕ). With firmness.

Fermáta, *It.* (fâr-*mä*-tä). A pause, hold, interruption.

Férmo, *It.* (*fâr*-mō). Firm, decided.

Feróce, *It.* (fä-*rō*-chĕ). Wild, fierce.

Fervénte, *It.* (fâr-*vān*-tĕ). Fervent, passionate.

Fes, *Ger.* (fĕs). F♭.

Fest, *Ger.* (fĕst). A festival.

Feste, *Ger.* (*fĕs*-tĕ). } Firmness.
Festigkeit, *Ger.* (*fĕs*-tig-kīt). }

Festiglich, *Ger.* (*fĕs*-tĭg-lĭkh). Firmly.

Festlich, *Ger.* (*fĕst*-lĭkh). Solemn.

Festlichkeit, *Ger.* (*fĕst*-lĭkh-kīt). Solemnity.

Feuer, *Ger.* (*foi*-ĕr). Fire, passion.

Fiácco, *It.* (fē-*äk*-kō). Languishing.

Fidúcia, *It.* (fē-*doo*-chē-ä). Boldness.

Fier, *Fr.* (fī-ār). Proud, haughty.

Fiéro, *It.* (fē-*ā*-trō). Wild, fierce.

Fifth. An interval containing five degrees.

Figurá, *It.* (fē-goo-*rä*). A motive; a group of notes.

Figuráte counterpoint, *It.* (fē-goo-*rä*-tĕ). Counterpoint consisting of somewhat rapid phrases or figures containing changing and passing notes.

Fin, *Fr.* (fănh). End, close.

Finale, *It.* (fē-*nä*-lĕ). Last movement of a vocal or instrumental composition; also the closing number of an act in an opera.

Fine, *It.* (*fē*-nĕ). End, close.

Fíno, *It.* (*fē*-nō). Till, up to, as far as.

Fínqui, *It.* (*fēn*-quē). To this place.

Fiochétto, *It.* (fē-ō-*kĕt*-tō). Faint, veiled.

Fioríto, *It.* (fē-ō-*rē*-tō). Florid, embellished.

Fis, *Ger.* (fĭs). F♯.

Fistel, *Ger.* (*fĭs*-t'l). Feigned voice. Falsetto.

Flat. A character (♭) which when placed before a note lowers it a half-tone.

Flébile, *It.* (*flā*-bē-lĕ). Mournful.

Flessíbile, *It.* (flĕs-*sē*-bē-lĕ). Flexible.

Flóreo, *Sp.* (*flō*-rā-ō). A flourish.
Florid. A term given to music embellished with figures, runs, etc.
Flüchtig, *Ger.* (*flükh*-tïg). Lightly, hastily.
Flutée, *Fr.* (*flü*-tā). Soft, sweet.
Fóco, *It.* (*fō*-kō). Fire, ardor.
Focosíssimo, *It.* (fō-kō-*zē's*-sē-mō). Very ardently.
Fois, *Fr.* (fwä). Time.
Folatre, *Fr.* (fō-*lätr*). Playful, lively.
Fórte, *It.* (*fōr*-tĕ). Loud.
Forte possíbile, *It.* (*fōr*-tĕ pŏs-*sē*-bē-lĕ). As loud as possible.
Fortézza, *It.* (fōr-*tät*-zä). Force.
Fortíssimo, *It.* (fōr-*tē's*-sē-mō). Very loud.
Fórtsingen, *Ger.* (*fōrt*-sĭng-ĕn). To continue singing.
Fórza, *It.* (*fōr*-tsä). Force.
Forzándo, *It.* (fōr-*tsän*-dō). A term used when a note or chord is to be strongly accented.
Forzáre, *It.* (fōr-*tsä*-rĕ). To strengthen.
Fourth. An interval containing four degrees.
Franchézza, *It.* (frän-*kät*-zä). Confidence, freedom.
Fredónner, *Fr.* (frā-*dŏn*-nā). To trill, to shake.
Frei, *Ger.* (frī). Free.
Frescaménte, *It.* (frĕs-kä-*män*-tĕ). Vigorously.
Frésco, *It.* (*frĕs*-kō). Vigorous.
Frétta, *It.* (*frĕt*-tä). Haste, speed.
Freude, *Ger.* (*froy*-dĕ). Joy.
Freudengesang, *Ger.* (*froy*-d'n-gĕ-*sängk*). Song of joy.
Freudig, *Ger.* (*froy*-dïg). Joyful.
Frisch, *Ger.* (frĭsh). Lively, vigorous.
Frívolo, *It.* (*frē*-vō-lō). Frivolous, trifling.
Fröhlich, *Ger.* (*frö*-lïkh). Joyous, gay.
Funèbre, *Fr.* (fü-*nĕbr*). Funereal, mournful.
Funf-stimmig, *Ger.* (*funf*-shtĭm-mïg). For five parts.
Fuóco, *It.* (foo-*ō*-kō). Fire, spirit.
Fúria, *It.* (*foo*-rē-ä). Fury, passion.
Furibóndo, *It.* (foo-rē-*bōn*-dō). } Furious, passionate.
Furióso, *It.* (foō-rē-*ō*-zō). }
Furóre, *It.* (foo-*rō*-rē). Fury, passion, vehemence.
Fusa, *Lat.* (*fū*-sä). A quaver.
Fuss, *Ger.* (foos). Foot.

G. The fifth tone in the natural diatonic scale.
Gagliárdo, *It.* (gäl-yē-*är*-dō). Gay, brisk.
Gai, *Fr.* (gā). Lively, gay.
Gajaménte, *It.* (gä-yä-*män*-tĕ). Gaily, cheerfully.
Galante, *Fr.* (gă-länt) and *It.* (gä-*län*-tĕ). Graceful.
Galánterstyl, *Ger.* (gä-*länt*-ĕr-shtēl). Free style; ideal style.
Gamut. A scale, or staff; also an old English term for the key of G.
Ganz, *Ger.* (gänts). Whole, entire; also, all, very.
Ganz langsam, *Ger.* (*gänts läng*-säm). Very slowly.
Ganze note, *Ger.* (*gän*-tsĕ *nō*-tĕ). A whole note.
Garbataménte, *It.* (gär-bä-tä-*män*-tĕ). Gracefully.
Gargántear, *Sp.* (gär-*gän*-tĕ-*är*). To quaver; to warble.
Gauche, *Fr.* (gōzh). Left.
Gaudénte, *It.* (gä-oo-*dän*-tĕ). } Joyous.
Gaudióso, *It.* (gä-oo-dē-*ō*-zō). }
Gayménte, *Sp.* (ghē-*män*-tĕ). Gaily, lively.
G-clef. The character used to fix the position of one lined G on the staff; also called treble-clef.
Gebróchen, *Ger.* (ghĕ-*brō*-kh'n). Broken, arpeggioed
Gebróchene akkórde, *Ger.* (ghĕ-*brō*-kh'n äk-*kōr*-dĕ). Broken chords.
Gebunden, *Ger.* (ghĕ-*boon*-d'n). Tied, legato.
Gedampft, *Ger.* (ghĕ-*dämpft*). Muted.
Gefállen, *Ger.* (ghĕ-*fäl*-'n). Pleasure, liking.
Gefällig, *Ger.* (ghĕ-*fäl*-lïg). Graceful.
Gefuhl, *Ger.* (ghĕ-*fühl*). Emotion, expression.
Gehálten, *Ger.* (ghĕ-*häl*-t'n). Held, sustained.
Géhend, *Ger.* (*gā*-ĕnd). Andante.
Gelássen, *Ger.* (ghĕ-*läs*-s'n). Calm.
Gelaufig, *Ger.* (ghĕ-*loy*-fïg). Fluent.
Gelaufigkeit, *Ger.* (ghĕ-*loy*-fïg-kīt). Celerity, fluency, velocity.
Gemáchsam, *Ger.* (ghĕ-*mākh*-säm). } Comfortable, easy-going.
Gemachlich, *Ger.* (ghĕ-*mākh*-lïkh). }
Gemählig, *Ger.* (ghĕ-*mā*-lïg). By degrees.
Gemässigt, *Ger.* (ghĕ-*mäs*-sïgt). Moderate.
Gemüth, *Ger.* (ghĕ-müt). Soul, feeling.
Gemüthlich, *Ger.* (ghĕ-*müt*-lïkh). Expressive.
Generóso, *It.* (jā-nĕ *rō*-zō). Noble, dignified.
Gentil, *Fr.* (zhän*h*-tēl). } Graceful.
Gentile, *It.* (jĕn-*tē*-lĕ). }
Geráde táktart, *Ger.* (ghĕ-*rä*-dĕ *täkt*-ärt). Common time.
Geriesel, *Ger.* (ghĕ-*rē*-z'l). A soft, murmuring sound.
Ges, *Ger.* (ghĕs). G♭.
Gesáng, *Ger.* (ghĕ-*sängk*). Art of singing; song, hymn, melody, air.
Geschíck, *Ger.* (ghĕ-*shĭk*). Skill, dexterity.
Geschleift, *Ger.* (ghĕ-*shlīft*). Slurred, legato.
Geschwínd, *Ger.* (ghĕ-*shvĭnd*). Rapid, swift.
Gesteigert, *Ger.* (gĕ-*shtī*-ghert). Crescendo.
Getheilt, *Ger.* (ghĕ-*tīlt*). } Divided.
Geteilte, *Ger.* (ghĕ-*tīlt*). }
Getrágen, *Ger.* (ghĕ-*trä*-g'n). } Sustained.
Gezógen, *Ger.* (gĕt-*zō*-g'n). }
Getrost, *Ger.* (ghĕ-*trōst*). Confidently.
Giochévole, *It.* (jē-ō-*kā*-vō-lĕ). Playfully.
Giocolarménte, *It.* (jē-ō-kō-lär-*mān*-tĕ). Merrily.
Giocondaménte, *It.* (jē-ō-kŏn-dä-*mān*-tĕ). Joyfully, gaily.
Giocóndo, *It.* (jē-ō-*kōn*-dō). Gay.
Giocóso, *It.* (jē-ō-*kō*-zō). Playful.
Giója, *It.* (jē-*ō*-yä). Joy.
Gioviále, *It.* (jē-ō-vē-*ä*-lĕ). Jovial, cheerful.
Gis, *Ger.* (ghĭs). G♯.
Giubilóso, *It.* (joo-bē-*lō*-zō). Jubilant.
Giuocánte, *It.* (joo-ō-*kän*-tĕ). Playful.
Giusto, *It.* (*joos*-tō). Suitable, strict, (tempo-giusto), exact. Allegro giusto, moderately fast.
Giustézza, *It.* (joos-*tät*-sä). Precision.
Glatt, *Ger.* (glät). Smooth, even.
Gleich, *Ger.* (glïkh). Alike, equal.
Gleichstimmig, *Ger.* (*glïkh* shtĭm-mïg). Harmonious.
Gleiten, *Ger.* (*glī*-t'n). To glide.
Glissándo, *It.* (glēs-*sän*-dō). Gliding.
Glósa, *Sp.* (*glō*-zä). A variation.
Gorgéggio, *It.* (gŏr-*gād*-jē-ō). A trill, a shake, in singing.
Goût, *Fr.* (goo). Taste, style.
Grace. An embellishment not essential to the melodic or harmonic structure of a composition. The long appoggiatura is an exception; it was written as a small (grace) note in order to evade the rule against the use of unprepared dissonances.

Grácieux, *Fr.* (*grä*-sĭ-ŭh). } Graceful.
Grácile, *It.* (*grä*-chē-lĕ). }
Gradualménte, *It.* (grä-doo-äl-*mān*-tĕ). } Gradually.
Graduellement, *Fr.* (grä-*dwĕl*-mänh). }
Grand, *Fr.* (gränh). Large, great.
Grandézza, *It.* (grän-*dāt*-sä). Dignity, grandeur.
Grandióso, *It.* (grän-dē-*ō*-zō). Grand, majestic.
Grán gústo, *It.* (grän *goos*-tō). Lofty, elevated.
Gratióso, *It.* (grä-tē-*ō*-zō). Grazioso.
Grave, *Fr.* (grăv) and *It.* (*grä*-vĕ). One of the slowest Tempos. A term used to denote a slow and serious movement.
Gravisonánte, *It.* (grä-vē-zō-*năn*-tĕ). Loud sounding.
Grázia, *It.* (*grä*-tsē-ä). Grace.
Grazióso, *It.* (grä-tsē-*ō*-zō). Graceful.
Greater. Major.
Grell, *Ger.* (grĕll). Shrill, acute.
Grob, *Ger.* (grōb). Low voice, bass.
Gross, *Ger.* (grōs). Great, grand, major.
Gruppétto, *It.* (grūp-*pā*-tō). At the present time this term is given to the turn and various groups of grace-notes.
Guerriéro, *It.* (gwĕr-rē-*ā*-rō). Martial.
Gunst, *Ger.* (goonst). Tenderness.
Gusto, *It.* (goos-tō). Taste.

H, *Ger.* The note B.
Hallen, *Ger.* (*häl*-l'n). To sound, to clang.
Halt, *Ger.* (hält). A hold (𝄐).
Hárdiment, *Fr.* (*här*-dĭ-mänh). Boldly.
Harmónieux, *Fr.* (här-*mō*-nĭ-*üh*). Harmonious.
Harmónisch, *Ger.* (här-*mō*-nĭsh). Harmonic.
Harmony. The art of combining tones of different pitch, and the placing in their correct position and relation of the chords so formed.
Hart, *Ger.* (härt). Hard, major.
Hart-klingend, *Ger.* (*härt-klĭng*-ĕnd). Harsh.
Hate, *Fr.* (hât). Haste, speed.
Haupt, *Ger.* (howpt). Head, chief, principal.
Haut, *Fr.* (hō). High, acute.
Head voice. The upper register of the voice.
Héftig, *Ger.* (*hĕf*-tĭg). Passionate, violent.
Heimlich, *Ger.* (*hīm*-lĭkh). Mysterious.
Heiss, *Ger.* (hīss). Ardent.
Heiter, *Ger.* (*hī*-tĕr). Serene, cheerful.
Hell, *Ger.* (hĕl). Clear, bright.
Hélle stimme, *Ger.* (*hĕl*-lĕ *shtĭm*-mĕ). A clear voice.
Heraufgehen, *Ger.* (hār-*owf*-gā'n). To ascend.
Heroic. Grand, noble, bold.
Hervórgehóben, *Ger.* (hâr-*fōr*-ghĕ-*hō*-b'n). Brought into prominence.
Hervórhébend, *Ger.* (hâr-*fōr-hā*-bĕnd). } Bringing into prom-
Hervórtretend, *Ger.* (hâr-*fōr*-trĕ-tĕnd). } inence.
Hérzig, *Ger.* (*hĕrt*-zĭg). } Hearty.
Hérzlich, *Ger.* (*hĕrts*-lĭkh). }
Hirtlich, *Ger.* (*hĭrt*-lĭkh). Pastoral.
His, *Ger.* (hĭs). B♯.
Hoch, *Ger.* (hōkh). High, acute.
Hochfeierlich, *Ger.* (*hōkh-fī*-ĕr-lĭkh). Very solemn.
Hóchmuth, *Ger.* (*hōhk*-moot). Pride, dignity.
Höhe, *Ger.* (*hō*-hĕ). High pitch; high register.
Hóheit, *Ger.* (*hō*-hīt). Dignity.
Hold. The character 𝄐 placed over or under a note indicating that such a note is to be prolonged beyond its time-value. The hold is also placed over a bar or double-bar indicating a pause before proceeding to the next measure or movement. It may also indicate the end of the composition.
Homophone, *Fr.* The enharmonic of any tone, as f of e♯, g of f𝄪.
Homophonic. In modern music a term used for compositions in plain harmony.
Humoresque. } A title given to compositions of a humorous
Humoreske. } or fantastic style.
Húrtig, *Ger.* (*hoor*-tĭg). Quick, swift.
Hymn. A religious or sacred song, usually intended to be sung by a congregation.

Il, *It.* (ēl). The.
Ilaritá, *It.* (ē-lär-ē-*tä*). Hilarity.
Il piu fórte possíble, *It.* (ēl *pē*-oo *fōr*-tĕ pŏs-*sē*-bē-lĕ). As loud as possible.
Il volteggiáre, *It.* (ēl vōl-tĕd-jē-*ä*-rĕ). Crossing the hands in playing the piano.
Immer, *Ger.* (*ĭm*-mĕr). Always.
Impatiénte, *It.* (ēm-pä-tē-*ān*-tĕ). Restless, vehement.
Imperióso, *It.* (ēm-pā-rē-*ō*-zō). Haughty, lofty.
Impeto, *It.* (*ēm*-pĕ-tō). Impetuosity.
Impetuóso, *It.* (ēm-pā-too-*ō*-zō). Impetuous.
Imponénte, *It.* (ēm-pō-*nān*-tĕ). Imposing, impressive.
In, *It.* and *Ger.* Into, in.
Inacutíre, *It.* (ēn-ä-koo-*tē*-rĕ). To make sharp.
Inbrunst, *Ger.* (*ĭn*-broonst). Ardor, fervor.
Inbrünstig, *Ger.* (*ĭn*-brüns-tĭg). Ardent, fervent.
Incalzándo, *It.* (ēn-käl-*zän*-dō). Increasing in time and tone.
Incantáble, *Sp.* (ēn-kän-*tä*-blĕ). Cannot be sung.
Inconsoláto, *It.* (ēn-kŏn-sō-*lä*-tō). Disconsolate.
Indecíso, *It.* (ēn-dĕ-*chē*-zō). Undecided.
Indegnáto, *It.* (ēn-dān-*yä*-to). Furiously.
Indifferénte, *It.* (ēn-dēf-fē-*rān*-tĕ). Indifferent, careless.
Infernále, *It.* (ēn-fâr-*nä*-lĕ). Infernal.
Infervoráto, *It.* (ēn-fâr-vō-*rä*-tō). Fervent, impassioned.
Infiammataménte, *It.* (ēn-fē-äm-mä-tä-*mān*-tĕ). In an excited manner.
In frétta, *It.* (ēn *frĕt*-tä). In haste.
Infuriánte, *It.* (ēn-foo-rē-*än*-tĕ). Furious.
Infuriáto, *It.* (ēn-foo-rē-*ä*-tō). Enraged.
Ingégno, *It.* (ēn-*gān*-yō). Skill, discretion.
Inhalt, *Ger.* (ĭn-*hält*). Conception, subject matter.
Innig, *Ger.* (*ĭn*-nĭg). Fervent, intense.
Innigkeit, *Ger.* (*ĭn*-nĭg-kīt). Fervency of feeling.
Inno, *It.* (ēn-nō). Hymn.
Innocénte, *It.* (ēn-nō-*chān*-tĕ). Natural.
Inquiéto, *It.* (ēn-quē-*ā*-tō). Restless.
Insensíbile, *It.* (ēn-sĕn-*sē*-bē-lĕ). Imperceptible.
Insisténdo, *It.* (ēn-sēs-*tān*-dō). Urgently.
Instandig, *Ger.* (ĭn-*shtän*-dĭg). } Urgent.
Instánte, *It.* (ēn-*stän*-tĕ). }
Instanteménte, *It.* (ēn-stän-tĕ-*mān*-tĕ). Instantly.
Instrumentation. The art of composing, arranging, or adapting music for several instruments of various kinds. Orchestration.
In témpo, *It.* (ēn *tām*-pō). In time.

Intenzionáto, *It.* (ēn-tān-tsē-ō-*nä*-tō). With emphasis.
Intercaláre, *It.* (ēn-târ-kä *lä*-rĕ). The burden of a song.
Interlude. An instrumental strain played after the stanza of a hymn or song. An intermezzo.
Intermède, *Fr.* (ăn*h*-tĕr-*mĕd'*). Interlude.
Intermézzo, *It.* (ēn-târ-*mät*-sō). A title given to instrumental compositions of various kinds, also to certain short movements in a symphony or suite; an intermediate movement.
Interrótto, *It.* (ēn-târ-*rōt*-tō). Interrupted, broken.
Interruzióne, *It.* (ēn-târ-root-sē-*ō*-nĕ). Interruption.
Interval. The difference in pitch between two tones.
Intimo, *It.* (*ēn*-tē-mō). Heartfelt.
Intonáre, *It.* (ēn-tō *nä*-rĕ). To sound the keynote.
Intonation. Tone production, either vocal or instrumental.
Intonáto, *It.* (ēn-tō-*nä*-tō). Set to music.
Intráda, *It.* (ēn-*trä*-dä). A prelude.
Intrépido, *It.* (ēn-*trä*-pē-dō). Bold.
Invention. A title given to short instrumental pieces in free contrapuntal style in which the theme or subject was developed according to the composer's pleasure.
Ira, *It.* (ē-rä). Anger, passion.
Irataménte, *It.* (ē-rä-tä-*mān*-tĕ). Angrily, passionately.
Irresolúto, *It.* (ēr-rā-zō-*loo*-tō). Hesitating, irresolute.
Istésso témpo, *It.* (ēs-*tās*-sō *tām*-pō). Same time. A term which indicates that the tempo of either the measure or measure-note remains the same as before, even though the time-signature is changed. It is also used to indicate a return to the former tempo after an interruption of the movement.
Istrépito, con, *It.* (ēs-*trā*-pē-tō). With noise and bluster.
Italian mordent. A short shake, or trill.
I trovatóri, *It.* (ē trō-vä-*tō*-rē). The troubadours.

Jaeger-chor, *Ger.* (*yā*-ghĕr-kōr). Hunting chorus.
Jagd, *Ger.* (yägd). Hunting.
Jagdhorn, *Ger.* (yägd-hōrn). Hunting horn.
Jagdstück, *Ger.* (yägd-shtük). Hunting-piece.
Jauchzend, *Ger.* (*yowkh*-tsĕnd). Shouting, joyful.
Jouer, *Fr.* (zhoo-ā). To play.
Jubilate. The 100th psalm.
Juguéte, *Sp.* (hoo-yoo-*ā*-tĕ). A carol.
Juste, *Fr.* (zhüst). True, just, accurate.

Kádenz, *Ger.* (*kä*-dĕnz). Cadence.
Kámmer, *Ger.* (*käm*-mĕr). Chamber or small hall.
Kámmer-concért, *Ger.* (*käm*-mĕr-kŏn-*tsĕrt*). Chamber concert.
Kámmer-músik, *Ger.* (*käm*-mĕr-*moo*-zīk). Chamber music.
Kámmer-styl, *Ger.* (*käm*-mĕr-shtēl). Chamber music style.
Kánon, *Ger.* (*kä*-nōn). Canon.
Keck, *Ger.* (kĕk). Bold.
Keckheit, *Ger.* (*kĕk*-hīt). Boldness, dash.
Kehle, *Ger.* (*kā*-lĕ). The voice, the throat.
Kettentriller, *Ger.* (*kĕt*-t'n-trĭl-lĕr). A chain of trills.
Key. The succession of tones which form the major or minor scale.
Key-note. The tonic, or first degree of a diatonic scale.
Key signature. The sharps or flats placed after the clef. The exceptions to this definition are the keys of C major and A minor, which have no sharps or flats placed after the clef.
Kinderscenen, *Ger.* (*kĭn*-dĕr-sān-ĕn). Scenes of childhood.
Kinderstücke, *Ger.* (*kĭn*-dĕr-shtü-kĕ). Compositions for children.
Kindlich, *Ger.* (*kĭnd*-lĭkh). Childlike; with unaffected simplicity.
Kirchenmusik, *Ger.* (*kĭr*-kh'n-*moo*-zīk). Church-music.
Klage, *Ger.* (*klä*-ghĕ). Lamentation.
Klang, *Ger.* (kläng). A sound or tone.
Klang-saal, *Ger.* (kläng-säl). Concert-room.
Klárheit, *Ger.* (*klär*-hīt). Clearness.
Klärlich, *Ger.* (*klār*-lĭkh). Clearly.
Klavier, *Ger.* (klä-*fēr*). In modern usage, a pianoforte of any kind.
Klein, *Ger.* (klīn). Small; minor.
Klingbar, *Ger.* (*klĭng*-bär). Resonant.
Kómisch, *Ger.* (*kōm*-ĭsh). Comical.
Komponieren, *Ger.* (kōm-pō-*nē*-rĕn). To compose.
Kompónist, *Ger.* (kōm-*pō*-nĭst). Composer.
Konzért, *Ger.* (kōn-*tsĕrt*). Concert; concerto.
Konzértmeister, *Ger.* (kōn-*tsĕrt-mīs*-tĕr). Leader, first violin.
Kopf, *Ger.* (kōpf). Head.
Kopfstimme, *Ger.* (*kōpf*-shtĭm-mĕ). Head-voice.
Kraft, *Ger.* (kräft). Energy, force.
Kräftig, *Ger.* (*kräf*-tĭg). Vigorous.
Kriegerisch, *Ger.* (*krē*-ghĕr-ĭsh). Martial, warlike.
Kriegs-gesang, *Ger.* (*krēgs*-ghĕ-*säng*k). } A war-song.
Kriegs-lied, *Ger.* (krēgs-lēd). }
Kühn, *Ger.* (kün). Short.
Kunst, *Ger.* (koonst). Art.
Kurz, *Ger.* (koorts). Short.
Kürzen, *Ger.* (*kür*-tsen). To abridge.
Kurz und bestímmt, *Ger.* (koorts oond bĕ-*shtĭmt*). Short and decided.
Kurzung, *Ger.* (*kür*-tsoongk). Abbreviation.

La, *Fr. and It.* (lä). The note A; also the sixth degree of the diatonic scale.
La chasse, *Fr.* (lä shäss). Hunting style.
Lacrimóso, *It.* (lä-crē-*mō*-zō). } Mournful.
Lagnevóle, *It.* (län-yā-*vō*-lĕ). }
La déstra, *It.* (lä *dās*-trä). The right hand.
Lamentábile, *It.* (la-mĕn-*tä*-bē-lĕ). }
Lamentándo, *It.* (lä-mĕn-*tän*-dō). } In a sad, lamenting style.
Lamentévole, *It.* (lä-mĕn-*tā*-vō-lĕ). }
Lamentóso, *It.* (lä-mĕn-*tō*-zō). }
Lampons, *Fr.* (län*h*-pŏn*h*). Drinking songs.
Ländler, *Ger.* (*länd*-lĕr). A slow waltz belonging to South Germany and Austria.
Lánd-lied, *Ger.* (*länd*-lēd). A rustic song.
Lángsam, *Ger.* (*läng*-säm). Slow.
Lángsamer, *Ger.* (*läng*-sä-mĕr). Slower.
Languenténte, *It.* (län-guĕ-*mān*-tĕ). Languishingly.
Languéndo, *It.* (län-*guān*-dō). }
Languénte, *It.* (län-*guān*-tĕ). } Plaintive, languishing.
Lánguido, *It.* (*lān*-guē-dō). }
Largaménte, *It.* (lär-gä *mān*-tĕ). In a broad style without changing the time.
Largándo, *It.* (lär-*gän*-dō). Somewhat slower and more marked.
Large, *Fr.* (lärzh). Sostenuto.

Larghétto, *It.* (lär-*gāt*-tō). A movement not quite so slow as large.

Larghíssimo, *It.* (lär-*ghēs*-sē-mō). Extremely slow.

Lárgo, *It.* (*lär*-gō). Broad, slow, and stately; the slowest tempo-mark.

Lastimosaménte, *Sp.* (läs-tē-mō-zä-*mān*-tĕ). In a doleful manner.

La strétta, *It.* (lä *strāt*-tä). A term indicating that a passage is to be played in quicker time.

Läufer, *Ger.* (*loi*-fĕr). A run.

Launenstück, *Ger.* (low-nĕn-shtük). A voluntary.

Launig, *Ger.* (*low*-nĭg). In a light, gay, humorous style.

Laut, *Ger.* (lowt). Loud; a sound.

Läuten, *Ger.* (*loi*-t'n). To ring, to sound.

La vóce, *It.* (lä *vō*-chĕ). The voice.

Lay. A melody, song, or tune.

Le, *Fr.* and *It.* (lĕ). The.

Lead. A cue; also the giving-out of a theme by one part.

Leader. Conductor.

Leading-note. The seventh degree of the major and harmonic minor scales.

Leaning-note. Appoggiatura.

Lében, *Ger.* (*lā*-b'n). Life, vivacity.

Lebéndig, *Ger.* (lā-*bĕn*-dĭg). } Lively, animated.
Lébhaft, *Ger.* (*lāb*-häft). }

Leçon, *Fr.* (lā-sŏn*h*). A lesson, study.

Leere Saiten, *Ger.* (lār sī-t'n). Open strings.

Legábile, *It.* (lĕ-*gä*-bē-lĕ). Smooth.

Legándo, *It.* (lĕ-*gän*-dō). Slurring.

Legáre, *It.* (lĕ-*gä*-rĕ). To slur, or bind.

Legatíssimo, *It.* (lĕ-gä-*tēs*-sē-mō). Very smooth and connected.

Legáto, *It.* (lĕ-*gä*-tō). In a smooth and connected manner.

Legáto assai, *It.* (lĕ-*gä*-tō äs-sä-ē). Very close and connected.

Legatúra, *It.* (lĕ-gä-*too*-rä). A tie; a syncopation.

Leger, *Fr.* (lā-zhā). } Light.
Légère, *Fr.* (lā-zhâr). }

Légereté, *Fr.* (lā-*zhâ*-rĕ-tā). Agility, lightness.

Leggénda, *It.* (lĕd-*jān*-dä). A legend, a tale.

Leggerézza, *It.* (lĕd-jĕr-*āt*-tsä). Lightness.

Leggerménte, *It.* (lĕd-jĕr-*mān*-tĕ). Lightly.

Leggéro, *It.* (lĕd-*jā*-rō). With lightness.

Leggiadraménte, *It.* (lĕd-jē-ä-drä-*mān*-tĕ). Elegantly, gracefully.

Leggiádro, *It.* (lĕd-jē-*ä*-drō). Brisk and cheerful.

Leggieraménte, *It.* (lĕd-jē-âr-ä-*mān*-tĕ). }
Leggierménte, *It.* (lĕd-jē-ĕr-*mān*-tĕ). } Lightly.
Leggiéro, *It.* (lĕd-jē-*ā*-rō). }

Leicht, *Ger.* (līkht). Light, brisk, easy.

Leidenschaft, *Ger.* (*līd*-d'n-shäft). Passion, vehemence, fervency.

Leidenschaftlich, *Ger.* (*līd*-ĕn-shäft-līkh). Passionately.

Leise, *Ger.* (*lī*-zĕ). Soft, low.

Leitakkord, *Ger.* (*līt*-äk-*kōrd'*). Leading chord, one that suggests its own resolution.

Leiter, *Ger.* (*lī*-tĕr). Scale.

Leiter-fremd, *Ger.* (*lī*-tĕr-frĕmd). Accidental flats or sharps which do not belong to the key.

Leitmótiv, *Ger.* (līt-*mō*-tīf). Leading motive. A musical phrase used to indicate a character or an incident in an opera, oratorio, or music drama. The *leitmotiv* is also found in various pieces of program-music.

Leit-ton, *Ger.* (*līt*-tōn). Leading-note.

Léno, *It.* (*lā*-nō). Faint, feeble.

Lent, *Fr.* (län*h*). Slow.

Lentaménte, *It.* (lĕn-tä-*mān*-tĕ). Slowly.

Lentándo, *It.* (lĕn-*tän*-dō). Slackening the time.

Lentement, *Fr.* (län*h*t-män*h*). } Slowly.
Lenteménte, *It.* (lān-tĕ-*mān*-tĕ). }

Lenteur, *Fr.* (län*h*-tŭr). } Slowness.
Lentézza, *It.* (lĕn-*tāt*-tsä). }

Lentíssimo, *It.* (lĕn-*tēs*-sē-mō). Very slow.

Lénto, *It.* (*lān*-tō). Slow.

Lesser. Minor, smaller.

Lestaménte, *It.* (lĕs-tä-*mān*-tĕ). Briskly.

Lestézza, *It.* (lĕs-*tāt*-tsä). Briskness.

Lestíssimo, *It.* (lĕs-*tēs*-sē-mō). Very brisk.

Lésto, *It.* (*lās*-tō). Lively, brisk.

Letterále, *It.* (lĕt-tĕ-*rä*-lĕ). Literal.

Letteralménte, *It.* (lĕt-tĕr-äl-*mān*-tĕ). Literally.

Levézza, *It.* (lĕ-*vāt*-tsä). Lightness, levity.

Liaison, *Fr.* (lē ā-zŏn*h*). A tie.

Liberaménte, *It.* (lē-bĕ-rä-*mān*-tĕ). } Freely, easily.
Librement, *Fr.* (lēbr-mänh). }

Líbero, *It.* (*lē*-bĕ-rō). Free, unrestrained.

Lié, *Fr.* (lĭ-*ā*). Tied, legato.

Liebeslied, *Ger.* (*lē*-bĕs-lēd). Love-song.

Lieblich, *Ger.* (*lēb*-lĭkh). Sweet, lovely, charming.

Lié, coulant, *Fr.* (lĭ-ā koo-län*h*). Slurred, flowing.

Lied, *Ger.* (lēd). Song.

Liedchen, *Ger.* (*lēd*-kh'n). A short song.

Lieder-buch, *Ger.* (*lē*-dĕr-bookh). Song-book.

Lieder-dichter, *Ger.* (*lē*-dĕr-*dĭkh*-tĕr). Song-writer.

Lieder-kreis, *Ger.* (*lē*-dĕr-krīs). A series of songs.

Lieder ohne Worte, *Ger.* (*lē*-dĕr *ō*-nĕ *vōr*-tĕ). Songs without words.

Lieder-spiel, *Ger.* (*lē*-dĕr-shpēl). An operetta.

Lieder täfler, *Ger.* (*lē*-dĕr *tā*-flĕr). Glee-singers.

Ligáto, *It.* (lē-*gä*-tō). Legato.

Ligature. A group of notes to be sung to one syllable, in one breath, or phrased legato. Also a tie or syncopation.

Linke Hand, *Ger.* (*lĭn*-kĕ händ). Left hand.

Liríco, *It.* (*lē*-rē-kō). Lyric.

Líscio, *It.* (*lē*-shē-ō). Smooth.

L'istésso témpo, *It.* (l'ēs-*tās*-sō *tām*-pō). In the same time as the previous movement.

Lo, *It.* (lō). The.

Lob-gesang, *Ger.* (*lōb*-ghĕ-*zängk*). Hymn of praise.

Loco, *It.* (*lō*-kō). Place. Occurring after 8va the term indicates that the notes are to be performed as written.

Lontáno, *It.* (lŏn-*tä*-nō). Distant.

Loud pedal. Damper-pedal.

Lourd, *Fr.* (loor). Heavy.

Louré, *Fr.* (loo-rā). Slurred, legato, non staccato.

Luctuosaménte, *Sp.* (look-too-ō-zä-*mān*-tĕ). Mournfully.

Lugubre, *Fr.* (lü-gü-bruh) and *It.* (loo-*goo*-brĕ). Mournful.

Lúnga, *It.* (*loon*-gä). Long. When placed above or beneath a hold it signifies that the hold is to be greatly prolonged.

Lúnga pausa, *It.* (*loon*-gä pä-oo-zä). A long pause.

Luógo, *It.* (loo-ō-gō). Loco.

Lusingándo, *It.* (loo-zēn-*gän*-dō). } Coaxing.
Lusingánte, *It.* (loo-zēn-*gän*-tĕ). }

Lusinghévole, *It.* (loo-zēn-*gā*-vō-lĕ). } Coaxingly.
Lusinghevolménte, *It.* (loo-zēn-gā-vōl-*mān*-tĕ). }

Lusinghiére, *It.* (loo-zēn-ghē-*ā*-rĕ). } Coaxing.
Lusinghiéro, *It.* (loo-zēn-ghē-*ā*-rō). }

Lustig, *Ger.* (*loos*-tĭg). Merry, gay.

Lustlied, *Ger.* (*loost*-lēd). A merry song.

Luttóso, *It.* (loot-*tō*-zō). Mournful.

Luttuosaménte, *It.* (loot-too-ō-zä-*mān*-tĕ). Mournfully.

Lyrisch, *Ger.* (*lĭr*-ĭsh). Lyric.

Ma, *It.* (mä). But.

Madrigal. A vocal composition.

Maesa. A mass.

Maestá, *It.* (mä-ĕs-*tä*).
Maestáde, *It.* (mä-ĕs-*tä*-dĕ). } Majesty, dignity.
Maestáte, *It.* (mä-ĕs-*tä*-tĕ.) }

Maestévole, *It.* (mä-ĕs-*tā*-vō-lĕ). Majestic.

Maestevolíssimo, *It.* (mä-ĕs-tā-vō-*lēs*-sē-mō). Very majestic.

Maestevolménte, *It.* (mä-ĕs-tā-vōl-*mān*-tĕ). } Majestically;
Maestosaménte, *It.* (mä-ĕs-tō-zä-*mān*-tĕ). } with dignity.

Maestóso, *It.* (mä-ĕs-*tō*-zō). Majestic, stately, dignified.

Maestrále, *It.* (mä-ĕs-*trä*-lĕ). The stretto of a fugue when it is in canon form.

Maéstro, *It.* (mä-*ās*-trō). Master, professor.

Maggioláta, *It.* (mäd-jē-ō-*lä*-tä). A May song.

Maggióre, *It.* (mäd-jē-*ō*-rĕ). Major, greater.

Magiscóro, *It.* (mä-jēs-*kō*-rō). The head of a choir.

Main, *Fr.* (măn*h*). Hand.

Main droit, *Fr.* (măn*h* drwä). Right hand.

Main gauche, *Fr.* (măn*h* gōsh). Left hand.

Maître, *Fr.* (mātr). Master.

Majestät, *Ger.* (mä-zhĕs-*tāt*). Majesty.

Majestätisch, *Ger.* (mä-zhĕs-*tā*-tĭsh). Majestic.

Majeur, *Fr.* (mä-zhŭr). Major.

Major. Greater.

Major bob. A full peal upon eight bells.

Major chord. A chord having a major third and perfect fifth.

Major key. A key founded on the major scale.

Major scale. That form of the diatonic scale in which the half-tones or steps occur between the third and fourth, also the seventh and eighth, degrees, all other intervals being whole tones.

Major third. An interval containing three degrees and two whole tones.

Major tonic. A major scale.

Mal, *Ger.* (mäl). Time.

Malancónia, *It.* (mä-lan-*kō*-nē-ä). }
Malencónia, *It.* (mä-lĕn-*kō*-nē-ä). }
Malencónico, *It.* (mä-lĕn-*kō*-nē-kō). } Melancholy
Malincólia, *It.* (mä-lēn-*kō*-lē-ä). }
Malincólico, *It.* (mä-lēn-*kō*-lē-kō). }
Malincónia, *It.* (mä-lēn-*kō*-nē-ä). }

Malinconicaménte, *It.* (mä-lēn-kō-nē-kä-*mān*-tĕ). } In a
Malincónico, *It.* (mä-lēn-*kō*-nē-kō). } melan-
Malinconióso, *It.* (mä-lēn-kŏ-nē-*ō*-zō). } choly
Malinconóso, *It.* (mä-lēn-kō-*nō*-zō). } style.

Mama, *It.* (mä-mä). A term indicating the right hand in drum music.

Mánca, *It.* (män-kä). The left.

Mancándo, *It.* (män-*kän*-dō). Dying away.

Mandóla, *It.* (män-*dō*-lä). A mandolin, or cithern.

Mandoline. A kind of guitar.

Mandora. }
Mandore. } A small kind of lute or guitar.

Mánica, *It.* (*mä*-nē-*kä*). Fingering.

Maniéra, *It.* (mä-nē-*ā*-rä). Manner, method, style.

Manière, *Fr.* (măn-ē-*âr*). Manner.

Manieren, *Ger.* (mä-nē-r'n). Embellishments, graces.

Männerchor, *Ger.* (*mān*-nĕr-kōr). A male chorus; also the name of a composition for such a chorus.

Männergesangverein, *Ger.* (*mān*-nĕr-gĭuĕ-*zäng*-fē-*rīn*). A male vocal society.

Máno, *It.* (*mä*-nō). Hand.

Máno Dritta, *It.* (*mä*-nō *drēt*-tä). Right hand.

Máno Sinistra, *It.* (*mä*-nō sē-*nēs*-trä). Left hand.

Manual. The keyboard of an organ.

Marcándo, *It.* (mär-*kän*-dō). } These terms indicate that the
Marcáto, *It.* (mär-*kä*-tō). } music is to be performed with distinctness and emphasis.

Marcatéssimo, *It.* (mär-kä-*tās*-sē-mō). Very much marked or accented.

Marcáto il póllice, *It.* (mär-*kä*-tō ēl *pōl*-lē-chĕ). Mark or accent strongly the note played by the thumb.

Marche, *Fr.* (märsh).
Márcia, *It.* (*mär*-chē-ä). } A march.
Marsch, *Ger.* (märsh).

Marciále, *It.* (mär-chē-*ä*-lĕ). Martial.

Marióna, *Sp.* (mä-rē-*ō*-nä). A Spanish dance.

Markiert, *Ger.* (mär-kērt). Accented, marked.

Markiren, *Ger.* (mär-*kē*-r'n). To mark, to accent.

Marqué, *Fr.* (mär-kā). Marked, accented.

Marquer, *Fr.* (mär-kā). To mark, to accent.

Marseillaise, *Fr.* (mär-sāl-yāz). The Marseilles hymn; the national anthem of France.

Martelé, *Fr.* (mär-tĕ-lā). } Hammered. Strongly accented.
Martelláre, *It.* (mär-tĕl-*lä*-rĕ). }
Martelláto, *It.* (mär-tĕl-*lä*-tō). }

Marziále, *It.* (mär-tsē-*ä*-lĕ). Martial, warlike.

Mascheráta, *It.* (mä-skĕ-*rä*-tä). Masquerade.

Mass, *Ger.* (mäss). Measure, time.

Mässig, *Ger.* (*mās*-sĭg). Measured, moderate.

Mássima, *It.* (*más*-sē-mä). A semibreve.

Matináta, *It.* (mä-tē-*nä*-tä). A morning serenade.

Mattutíno delle tenebre, *It.* (mät-too-*tē*-nō dāl-lĕ tĕ-*nā*-brĕ). The service of the Tenebræ.

Maul-trommel, *Ger.* (mowl-trōm-mĕl). A Jew's harp.

Mazurka, *Ger.* (mä-*tsoor*-kä). A Polish dance of lively character, in $\frac{3}{4}$ or $\frac{3}{8}$ time, with a peculiar rhythm.

Measure. The space between two bars. A metrical unit of fixed time-value having a regular accent, and forming the smallest metrical subdivision of a composition.

Medésimo, *It.* (mĕ-*dā*-zē-mō). The same.

Mediant, *Lat.* (*mā*-dĭ-ănt). **Médiante,** *Fr.* (mā-dĭ-*ānht*). The third degree of the diatonic scale.

Medius, *Lat.* (mā-dĭ-ŭs). The tenor part.

Mehr, *Ger.* (mār). More.

Mehr-stimmig, *Ger.* (mār-*shtĭm*-mĭg). For several voices.

Mehr stimmiger gesang, *Ger.* (mār *shtĭm*-mĭ-ghĕr ghĕ-*zängk*). A glee or part song.

Meister, *Ger.* (*mīs*-tĕr). Master.

Meister-sänger, *Ger.* (*mīs*-tĕr-*säng*-ĕr). Master singer, minstrel.

Meister-stück, *Ger.* (*mīs*-tĕr-shtük). Masterpiece.

Melancólia, *It.* (mā-län-*kō*-lē-ä). **Mélancholie,** *Fr.* (mā-lăn*h*-kō-lē). Melancholy.

Mélange, *Fr.* (mā-*länzh*). A medley.

Melisma, *Gk.* (mĕ-*lĭs*-mä). A melodic ornament or embellishment.

Melismatic. Ornamented, embellished.

Melóde, *It.* (mā-*lō*-dĕ). **Melódia,** *It.* (mā-*lō*-dē-ä). **Mélodie,** *Fr.* (*mā*-lō-dē). Melody.

Melodeon. A kind of small reed organ.

Melódico, *It.* (mā-*lō*-dē-kō). Cantando.

Melody. A succession of any number of single notes. Sometimes used to denote the tune or air of a composition as separate from the bass or accompaniment.

Melologue. A combination of recitative and music.

Melopéa, *It.* (mā-lō-*pā*-ä). Music in general; words and music combined.

Melopomenos, *Gr.* (mĕl-ō-*pŏm*-ĕ-nŏs). Vocal melody.

Melos, *Gk.* (*mā*-lŏs). Melody.

Même, *Fr.* (mām). The same.

Mén allégro, *It.* (mān äl-*lā*-grō). Less quick.

Ménestrel, *Fr.* (mā-nĕs-trĕl). Minstrel.

Méno, *It.* (*mā*-nō). Less.

Méno fórte, *It.* (*mā*-nō *fōr*-tĕ). Less loud.

Menschen stimme, *Ger.* (*mĕn*-sh'n *shtĭm*-mĕ). Human voice.

Mén vívo, *It.* (mĕn *vē*-vō). Less spirit.

Mescolánza, *It.* (mĕs-kō-*län*-tsä). A medley.

Méssa, *It.* (*mās*-sä). **Messe,** *Ger.* (*mĕs*-sĕ) and *Fr.* (*mäss*). Mass.

Méssa di vóce, *It.* (*mās*-sä dē *vō*-chĕ). The crescendo and diminuendo of the voice on a sustained note; thus

Mestízia, *It.* (mĕs-*tē*-tse-ä). Sadness.

Mestaménte, *It.* (mĕs-tä-*mān*-tĕ). Plaintively.

Mésto, *It.* (*mās*-tō). **Mestóso,** *It.* (mĕs-*tō*-zō). Sad.

Mésure, *Fr.* (mā-zür). Measure.

Metal, *Sp.* (mā-*tăl*). Strength; compass of the voice.

Metállo, *It.* (mā-*tăl*-lō). A ringing quality of voice.

Meter, metre. The rhythmic element of music; the symmetrical grouping of musical rhythms; the construction and pulsation of the phrase in music.

Mézza vóce, *It.* (*mät*-tsä *vō*-chĕ). Half power; half voice.

Mézzo, *It.* (*mät*-tsō). Half.

Mézzo fórte, *It.* (*mät*-tsō *fōr*-tĕ). Half as loud as forte.

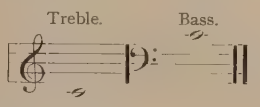
Mézzo lĭgato, *It.* (*mät*-tsō lē-*gä*-tō). A variety of pianoforte touch requiring a forcible stroke rather than a sudden return of the finger.

Mézzo piano, *It.* (*mät*-tsō pē-*ä*-nō). Not so loud as mezza forte, and not so soft as piano.

Mézzo sopráno, *It.* (*mät*-tsō sō-*prä*-nō). The female voice between soprano and alto.

Mi. Name of the note E in France, Italy, etc. Third degree of the diatonic scale.

Middle C. One lined or C.



Middle voices. Tenor and alto voices.

Mi dièse, *Fr.* (mē dĭ-*āz*). E♯.

Mignon, *Fr.* (mēn-yŏn*h*). Favorite.

Militairement, *Fr.* (mĭl-ē-*tār*-mān*h*). **Militarménte,** *It.* (mē-lē-tär-*mān*-tĕ). In military style.

Militar musik, *Ger.* (mē-lē-tär moo-sĭk). Military music.

Minaccévole, *It.* (mē-nät-*chĕ*-vō-lĕ). **Minaccevolménte,** *It.* (mē-nät-chĕ-vō*l*-*mān* tĕ). **Minacciándo,** *It.* (mē-nät-chĕ-*än*-dō). **Minacciosaménte,** *It.* (mē-nät-chē ō-zä-*mān*-tĕ). **Minaccióso,** *It.* (mē-nät-che-*ō*-zō). In a menacing, threatening, manner.

Minder, *Ger.* (*mĭn*-dĕr). Minor, less.

Mineur, *Fr.* (mī-*nür*). Minor.

Minim. A half note.

Minor. Smaller.

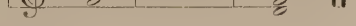
Minor chord. A chord having a minor third and perfect fifth.

Minor interval. A minor interval contains one half-tone less than a major; thus;

Minor key. A key founded on the minor scale.

Minor scale. That form of the diatonic scale in which the first and third degrees form a minor third.

Minor third. An interval containing three degrees and one whole tone and a half.



Minue, *Sp.* (*mē*-noo-ā). A minuet.

Minuet. The name of a slow, stately dance, said to have been invented in France about the middle of the 17th century.

Minuétto, *It.* (mē-noo-*ăt*-tō). A minuet.

Misch-Masch (mĭsh-mäsh). A medley.

Misshällig, *Ger.* (*mĭss*-hāl-lĭg). Discordant.

Missklang, *Ger.* (*mĭss*-klängk). Dissonance.

Misteriosaménte, *It.* (mēs-târ-ē-ō-zä-*mān*-tĕ). Mysteriously.

Misterióso, *It.* (mēs-târ-ē-*ō*-zō). Mysterious.

Misúra, *It.* (mē-*soo*-rä). A measure.

Misuráto, *It.* (mē-soo-*rä*-tō). Measured in exact time.

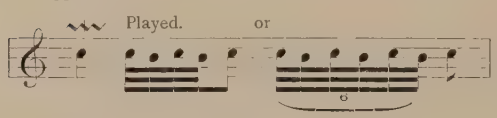
Mit, *Ger.* (*mĭt*). With.

Mittelkadenz, *Ger.* (*mĭt*-t'l-kä-*dĕnts*). A half cadence.

Mittelstimme, *Ger.* (*mĭt*-t'l-shtĭm-mĕ). An inner part or voice.

Móbile, *It.* (*mō*-bē-lĕ). With easy movement.
Mode. Key.
Modéré, *Fr.* (mō-dā-rā). Moderato.
Moderáto, *It.* (mŏd-ĕ *rä*-tō). Moderate degree of speed.
Modérna, (mō-*dâr*-nä). } *It.* Modern.
Modérno, (mō-*dâr*-nō). }
Modinha, (mō-*dēn*-ä). A Portuguese song.
Módo, *It.* (*mō*-dō). Mode; style.
Modulation. Passing from one key to another.
Moduliren, *Ger.* (mō-doo-*lē*-r'n). To modulate.
Modulo, *Lat.* (*mō*-dŭ-lō). To modulate, to compose.
Moll, *Ger.* (mōll). Minor.
Moll akkord, *Ger.* (mōl ăk-kōrd). Minor chord.
Moll dreiklang, *Ger.* (mōl *drī*-klängk). Minor triad.
Moll tonart, *Ger.* (*mol* tōn-ärt). Minor key.
Moll tonleiter, *Ger.* (mōl tōn-*lī*-tĕr). Minor scale.
Molleménte, *It.* (mōl-lĕ-*mān*-tĕ). Softly, gently.
Moltisonánte, *It.* (mōl-tē-zō-*nän*-tĕ). Resounding.
Mólto, *It.* (*mōl*-tō). Much, very.
Momentum, *Lat.* (mō-*mĕn*-tŭm). A quaver rest.
Monodic. For one voice.
Monody, *Ger.* and *Fr.* **Monodie** (mŏn-ō-*dē*), *It.* **Monodia** (mō-nō-dē-ä). Music in which the melody is confined to a single part; sometimes called the Homophonic Style.
Monophonic. In one part only.
Mordent. A grace performed by rapidly alternating a written note with the note on the next degree below. There are two kinds, the simple or short mordent (𝆖) which consists of three notes,

and the long mordent(𝆖) in which the lower note appears twice or oftener.



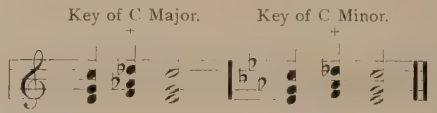
The Praller or inverted mordent consists of a written note followed by the note on the next degree above played in the same manner as the mordent. It has the sign of the mordent but without the cross-stroke (𝆖). A nearly obsolete mordent sign is, ◆◆, the inverted mordent ◆◆

N.B. Some writers have used these terms in the opposite sense, giving the mordent an upper auxiliary note.

Moréndo, *It.* (mō *rän*-dō). Dying away.
Mormorándo, *It.* (mŏr-mō-*rän*-dō). Very soft, subdued tone.
Mósso, *It.* (*mōs* sō). Moved.
Motet. A sacred composition of the anthem style.
Motif, *Fr.* (mō-tēf). A motive.
Motive. A short phrase or figure.
Móto, *It.* (*mō*-tō). Motion.
Motteggiándo, *It.* (mŏt-tād-jē-*än* dō). Bantering.
Muance, *Fr.* (mü *ànhs*). A change or variation of note
Munter, *Ger.* (*moon*-tĕr). Lively.
Munterkeit, *Ger.* (*moon*-tĕr-kit). Vivacity.

Musica, *Lat.* (mū-sĭ-kä), *and It.* (*moo*-zē-kä). }
Musik, *Ger.* (*moo*-zĭk). } Music.
Múta, *It.* (*moo*-tä). Change. A term much used in orchestral scores, meaning that the performer is to change the pitch or key of his instrument.
Mute. A contrivance used to deaden the tone of an instrument.
Muth, *Ger.* (moot). Spirit.
Muthig, *Ger.* (*moot* tig). Spirited, bold.
Muthwillig, *Ger.* (*moot*-vĭl-lĭg). Mischievous, lively.
Mutiren, *Ger.* (moo *tē*-r'n). To change the voice.

Nach, *Ger.* (näkh). After, according to, at.
Nachahmung, *Ger.* (näk-ä-moongk). Imitation.
Nach belieben, *Ger.* (näkh bĕ-*lē*-b'n). At pleasure.
Nach dem tact spielen, *Ger.* (näkh dĕm täkt *shpē*-l'n). To play in time.
Nach-druck, *Ger.* (*näkh*-drook). Accent, emphasis.
Nachdrücklich, *Ger.* (*näkh*-drük-lĭkh). } Emphatic, forcible.
Nachdrücksam, *Ger.* (*näkh*-drük-säm). }
Nachfolge, *Ger.* (*näkh* fōl ghĕ). Following after, succession.
Nach-hall, *Ger.* (*näkh*-häll). Reverberation, echo.
Nachklang, *Ger.* (*näkh*-klängk). Echo.
Nachklingen, *Ger.* (*näkh*-klĭng-ĕn). To echo, to resound.
Nachlassend, *Ger.* (*näkh*-läs-sĕnd). Slackening.
Nachschallen, *Ger.* (*näkh*-shäl-l'n). To echo.
Nachschlag, *Ger.* (*näkh* shläg). An after beat.
Nachsingen, *Ger.* (*näkh*-sĭng ĕn). To sing after.
Nachspiel, *Ger.* (*näkh* shpēl). A postlude.
Nächstverwandte töne, *Ger.* (*näkhst*-fĕr-*vänd*-tĕ *tö*-nĕ). The nearest related keys.
Nachtigall, *Ger.* (*näkh*-tĭ-gäll). Nightingale.
Nacht-musik, *Ger.* (*näkht-moo*-zĭk). Night-music; a serenade.
Nachtstandchen, *Ger.* (*näkht*-shtänd-kh'n). A serenade.
Nacht-stück, *Ger.* (*näkht* shtük). Night piece; a nocturne.
Nach und nach, *Ger.* (näkh oond näkh). By degrees.
Naif, *Fr.* (nä-ēf). }
Naïve, *Fr.* (nä-ēv). } Naïve; unaffected.
Naiv, *Fr.* (nä-*ēf*). }
Narránte, *It.* (när-*rän*-tĕ). In narrative style.
Natur, *Ger.* (nä-toor). Natural.
Natural. The sign ♮.
Naturále, *It.* (nä-too-*rä*-lĕ). Unaffected, natural.
Neapolitan Sixth. A major chord founded on the flat supertonic of any key.



Neben-note, *Ger.* (*nā*-b'n-*nō*-tĕ). Auxiliary note.
Necessário, *It.* (nā-chĕs-*sä*-rē-ō). A term indicating that the passage referred to must not be omitted.
Neglígénte, *It.* (nāl-yē-*jān*-tĕ).
Negli, *It.* (*nāl*-yē). }
Nei, *It.* (nā ē). }
Nel, *It.* (rāl). }
Nell', *It.* (nāl'l). } In the.
Nella, *It.* (nāl-lä). }
Nelle, *It.* (nāl-lĕ). }
Nello, *It.* (nāl-lō). }

Nello stesso tempo, *It.* (nāl-lō stĕs-sō tām-pō). In the same time.

Nel stilo antico, *It.* (nāl *stē*-lō än-*tē*-kō). In the ancient style.

Nel témpo, *It.* (nāl *tām*-pō). In time; in the previous time.

Net, *Fr.* (nā).
Nett, *Ger.* (nĕt).
Nettaménte, *It.* (nĕt-tä-*mān*-tĕ).
Nette, *Fr.* (nĕt). } Neatly, clearly.

Netteté, *Fr.* (nĕt-tā).
Nettheit, *Ger.* (*nĕt*-hīt).
Nettigkeit, *Ger.* (*nĕt*-tĭg-kīt). } Neatness, plainness, clearness.

Nétto, *It.* (*nāt*-tō). Neat, quick, clear.

Nicht, *Ger.* (nĭkht). Not.

Nicht zu geschwind, *Ger.* (nīkht tsoo ghĕ-*shvĭnd*'). Not too quick.

Nóbile, *It.* (*nō*-bē-lĕ). Noble.

Nobilménte, *It.* (nō-bēl-*mān*-tĕ).
Noblement, *Fr.* (nō-bl-män*h*). } Nobly, grandly.

Noch, *Ger.* (nōkh). Still, yet.

Noël, *Fr.* (nō-ĕl). A carol sung usually on the day before Christmas or on Christmas eve in the southern part of France.

Non, *It.* (nŏn). Not.

Nonet,
Nonett, *Ger.* (nō-*nĕt*).
Nonétto, *It.* (nō-*nāt*-tō). } A composition for nine voices or instruments.

Nonuplet. A group of nine notes of the same time-value, performed in the time proper to six or (more generally) eight of the same kind belonging to the regular rhythm.

Nota, *Lat. and It.* (nō-tä). A note.

Nota buóna, *It.* (nō-tä boo-*ō*-nä). An accented note.

Notation. The art of expressing musical tones or ideas by means of written characters.

Note. The character used to represent a musical tone and its time value.

Nuance, *Fr.* (nü-ä*n*s). A term referring to the "shading" of vocal or instrumental music; the change of time force, and expression indicated by the composer or introduced by the performer.

Nuóva, *It.* (noo-*ō*-vä).
Nuóvo, *It.* (noo-*ō*-vō). } New.

O, *It.* Or.

Obbligáti, *It.* (ōb-blē-*gä*-tĕ).
Obbligáto, *It.* (ōb-blē-*gä*-tō). } Indispensable: applied to a temporary solo in an orchestral work.

Ober, *Ger.* (*ō*-bĕr). Upper, over, higher.

Ober-manual, *Ger.* (*ō*-bĕr mä-noo-*ăl*'). The upper manual.

Ober-stimme, *Ger.* (*ō*-bĕr *shtĭm*-mĕ).
Ober-theil, *Ger.* (*ō*-bĕr-tīl). } The upper part.

Obertura, *Sp.* (ō-bĕr-*too*-rä). Overture.

Ober-werk, *Ger.* (*ō*-bĕr-vârk). The upper manual.

Obligat, *Ger.* (ōb-lĭ-gät).
Obligé, *Fr.* (ŏb-lē-zhā). } Obbligato.

Oblique motion. When one part moves, while the other remains stationary.

Obsisténte, *Sp.* (ōb-sīs-*tān*-tĕ). Resounding.

Ocio, *Sp.* (*ō*-thē-ō). Slowly. With ease.

Octave. The interval between the first and eighth tones of a diatonic scale. An interval between any tone and that seven degrees above.

Octet.
Octette, *Fr.* (ŏk-tĕt).
Octuor, *Fr.* (ŏk-*twōr*).
Oktett, *Ger.* (ōk-*tĕt*'). } A composition for eight voices or instruments.

Octochord.
Octogenary. } An instrument of eight strings.

Octuplet. A group of eight notes of the same time-value, performed in the time proper to six notes of the same kind belonging to the regular rhythm.

Oder, *Ger.* (*ō*-dĕr). Or, or else.

Oeuvre, *Fr.* (ôvr). Work.

Offen, *Ger.* (*ōf*-f'n). Open, parallel.

Offenbar, *Ger.* (*ōf*-f'n-bär). Open, manifest.

Ohne, *Ger.* (*ō*-nĕ). Without.

Oktave, *Ger.* (ōk-*tä*-fĕ). Octave.

Olio. A medley.

Ombra, *It.* (ōm-brä). Shading, nuance.

Omnes, *Lat.* (*ŏm*-nēs).
Omnia, *Lat.* (*ŏm*-nĭ-ä). } All. See Tutti.

Omnitonic. A term used to designate any instrument capable of producing all tones.

Ondeggiaménto, *It.* (ōn-dād-jē-ä-*mān*-tō). An undulating, quivering sound; a tremolo.

Ondeggiánte, *It.* (ōn-*dād*-jē-*än*-tĕ). Trembling, undulating, waving.

Ondulé, *Fr.* (ŏn*h*-dü-*lā*). Waving, trembling.

Onduliren, *Ger.* (ōn-doo-*lē*-r'n). A tremulous tone.

Ongarése, *It.* (ōn-gä-*rā*-zē). Hungarian.

Oppúre, *It.* (ŏp-*poo*-rĕ). Or, or else.

Opus, *Lat.* (ō-pŭs). A work.

Ordinário, *It.* (ōr-dē-*nä*-rē-ō). Common, ordinary.

Organ-point. Any tone sustained or repeated against a number of passing chords is termed an organ-point or pedal-point.

Ornament. An embellishment, a grace.

Ornataménte, *It.* (ōr-nä-tä-*mān*-tĕ).
Ornáto, *It.* (ōr-*nä*-tō). } Ornamented, embellished.

Orthisch, *Ger.* (*ōr*-tĭsh). High, acute.

Osservánza, *It.* (ōs-sâr-*vän*-tsä). Strictness in keeping time.

Ossía, *It.* (ōs-*sē*-ä). Or; or else.

Ostináto, *It.* (ōs-tē-*nä*-tō). Obstinate; thus *basso ostinato* denotes a ground bass; that is, a bass which is repeated again and again.

Otez, *Fr.* (ō-tā). Off.

Otium, *Lat.* (*ō*-shĭ-ŭm). Slowly, with grace and ease.

Ottáva, *It.* (ŏt-*tä*-vä). Octave.

Ottétto, *It.* (ŏt-*tāt*-tō). An octet.

Ottóne, *It.* (ŏt-*tō*-nĕ). Brass.

Ou, *Fr.* (oo). Or.

Ouvert, *Fr.* (oo-*vâr*). Open.

Ovvéro, *It.* (ŏv-*vā*-rō). Or.

Pacataménte, *It.* (pä-kä-tä-*mān*-tĕ). Placidly, quietly.

Pæan. A song of praise.

Paraphrase. A rearrangement, or adaptation, of a vocal or instrumental composition, for some other instrument or combination of instruments, with such embellishments and variations as the arranger may choose to introduce.

Parlándo, *It.* (pär-*län*-dō). A style of singing suggestive of recitative in clearness of enunciation: in spoken style.

Parte, *It.* (pär-tĕ). Part.

Partiménto, *It.* (pär-tē-*mān*-tō). A figured bass.

Partition, *Fr.* (pär-tē-sĭ-ŏn*h*). **Partitur,** *Ger.* (pär-tĭ-*toōr*). **Partitúra,** *Lat.* and *It.* (pär-tē-*too*-rä). **Partizióne,** *It.* (pär-tē-tsē-*ō*-nĕ). } A score.

Part-writing. The art of combining two or more vocal or instrumental parts. Sometimes used instead of the term counterpoint.

Paso de gargante, *Sp.* (pä-sō dĕ gär-*gän*-tä). Trill of the voice.

Passage. A repeated figure. A section of a composition.

Passággio, *It.* (päs-säd-jē-ō). A passage, modulation, or bravura embellishment.

Passing-notes. Notes foreign to the chords which they accompany, ascending or descending in diatonic or chromatic progression from one essential note of a chord to an essential note of the following chord.

Passionataménte, *It.* (päs-sē-ō-nä-tä-*mān*-tĕ). Passionately.

Passionáto, *It.* (päs-sē-ō-*nä*-tō). Impassioned.

Passióne, *It.* (päs-sē-*ō*-nĕ). Fervent emotion.

Passionné, *Fr.* (päs-sē-ŏn-nā). Passionato.

Pastíccio, *It.* (päs-*tēt*-chē-ō). **Pastíche,** *Fr.* (päs-*tēsh*). } A medley composed of excerpts from various operas.

Pastoral, Pastorále, *It.* (päs-tō-*rä*-lĕ). **Pastorelle,** *Fr.* (päs-tō-*rĕl*). } A vocal or instrumental composition generally in $\frac{6}{8}$, $\frac{9}{8}$, or $\frac{12}{8}$ time, and of rural or pastoral character.

Pas trop lent, *Fr.* (pä trō län*h*). Not too slow.

Patética, *It.* (pä-*tā*-tē kä). Pathetic.

Pateticaménte, *It.* (pä-tā-tē-kä-*mān*-tĕ). Pathetically.

Patético, *It.* (pä-*tā*-tē-kō). **Pathétique,** *Fr.* (pä-*tā*-tēk). } Pathetic.

Pathétiquement, *Fr.* (pä-*tā*-tēk-män*h*). Pathetically.

Pathetisch, *Ger.* (pä-tēt-ĭsh). Pathetic.

Patiménto, *It.* (pä-tē-*mān*-tō). Grief.

Paulatinaménte, *It.* (pä-oo-lä-*tē*-nä-*mān*-tĕ). Gently.

Pausa, *It.* (pä-oo-zä). Pause. A hold expressed by the sign 𝄐, which denotes that the note or rest over which it is placed is to be prolonged at the pleasure of the performer.

Paventáto, *It.* (pä-vĕn-*tä*-tō). Afraid, fearful.

Paventóso, *It.* (pä-vĕn-*tō*-zō). In a style expressive of fear.

Pean. A pæan; a song of praise.

Pedále, *It.* (pā-*dä*-lĕ), *Ger.* (pĕ-*dä*-lĕ), and *Fr.* (pā-*dăl*). Pedal.

Pedále dóppio, *It.* (pā *dä*-lĕ *dŏp*-pē-ō). Double pedals.

Pédale à chaque accord, *Fr.* (pā-*dăl* à shăk ăk-kŏr). Pedal with each chord.

Pedal-point. Organ point.

Pensóso, *It.* (pĕn-*sō*-zō). **Pensieróso,** *It.* (pĕn-sē-ā-*rō*-zō). } Contemplative, pensive.

Per, *It.* (pâr). Through, from, in, for, by.

Perçant, *Fr.* (pĕr-sän*h*). Piercing.

Perdéndo, *It.* (pâr-*dān*-dō). **Perdendósi,** *It.* (pâr-dān-*dō*-zĕ). } Dying away; morendo.

Perpetúo, *It.* (pâr-pā *too* ō). Perpetual.

Pesánte, *It.* (pĕ-*zän*-tĕ). Heavy, firm.

Pesanteménte, *It.* (pĕ-zän-tĕ-*mān*-tĕ). Heavily, impressively.

Petite, *Fr.* (pĕ-*tēt*). Small.

Peu, *Fr.* (pŭh). Little.

Peu à peu, *Fr.* (pŭh ă pŭh). Little by little.

Pézzi, *It.* (*pāt*-sē). Detached pieces of music.

Pézzo, *It.* (*pāt*-sō). A piece.

Phantasie, *Ger.* (fän-tä-*zē*). Fantasia.

Phantasie-stücke, *Ger.* (fän-tä-*zē*-shtük). A composition having the style and character of a fantasia.

Phantasiren, *Ger.* (fän-tä-*zē*-r'n). Improvising.

Philharmonic, *Gr.* (fĭl-här-*mŏn*-ĭk). Loving harmony or music.

Phrasing. The proper rendition of a composition with regard to the relative importance, melodic and rhythmic character, of its phrases.

Piacére, *It.* (pē-ä-*chā*-rĕ). According to the performer's desire. "At pleasure."

Piacévole, *It.* (pē-ä-*chā*-vō-lĕ). Smooth, suave.

Piacevolménte, (pē-ä-chĕ-vŏl-*mān*-tĕ). Smoothly.

Piaciménto, *It.* (pē-ä-chē *mān*-tō). The same as Piacere.

Pianétto, *It.* (pē-ä-*nāt*-tō). Very low, very soft.

Piangéndo, *It.* (pē-ä-*gān*-dō). **Piangévole,** *It.* (pē-än-*gā*-vō-lĕ). **Piangevolménte,** *It.* (pē-än-gā-vŏl-*mān*-tĕ). } Plaintive.

Pianíssimo, *It.* (pē-ān-*ĭs*-sē-mō). Very soft.

Piano, *It.* (pē-*ä*-nō). Soft.

Piccantéria, con, *It.* (pē-kän-*tā*-rē-ä). With sprightly, piquant expression.

Picchettáto, *It.* (pē-kĕt-*tä*-tō). **Picchiettáto,** *It.* (pē-kē-ĕt-*tä*-tō). Slightly detached. The mezzo-staccato in violin-playing expressed by staccato dots over which is placed a slur. Notes so marked are to be played in one bow.

Piccolo, *It.* (*pĕ*-kō-lō). Small.

Pièce, *Fr.* (pĭ *ās*). A piece. . . . . Suite de pieces, a collection of pieces.

Pieds, *Fr.* (pĭ-*ā*). Feet.

Piéna, *It.* (pē-*ā*-nä). **Piéno,** *It.* (pē-*ā*-nō). } Full.

Piéta, *It.* (pē-*ā*-tä). Pity, tenderness.

Pietosaménte, *It.* (pē-ā-tō-zä-*mān*-tĕ). Tenderly.

Pietóso, *It.* (pē-ā-*tō*-zō). Tender.

Pincé, *Fr.* (păn*h*-sā). 1. Plucked or twanged by the fingers, as the strings of a harp or guitar. 2. Pizzicato in violin-playing. 3. A mordent.

Piqué, *Fr.* (pĭ-*kā*). See Picchettato.

Pitch. The place a tone occupies in the musical scale.

Pittoríco, *It.* (pēt-tō-*rē*-kō). Embellished.

Piu, *It.* (pē-oo). More.

Piu lénto, *It.* (pē-oo *lān*-tō). More slowly.

Piu tósto, *It.* (pē-oo *tōs*-tō). Rather.

Pizzicáto, *It.* (pēt-sē-*kä*-tō). A term used in music for bow-instruments (violin, violoncello), directing the performer to play that portion of the music so marked by plucking the strings with the finger.

Placenteraménte, *It.* (plä-chĕn-tĕr-ä-*mān*-tĕ). Joyfully.

Placídaménte, *It.* (plä-*chē*-dä *mān*-tĕ). Calmly, smoothly.

Plácido, *It.* (*plä*-chē-dō). Calm, tranquil.

Plácito, *It.* (*plä*-chē-tō). Pleasure. Ad libitum.

Plagal cadence. The subdominant triad followed by the tonic.

Plainte, *Fr.* (plănɴt). A lament.

Plaintif, *Fr.* (plănɴ-tĕf). Plaintive, doleful.

Plaisanteries, *Fr.* (plā-zänɴ-t'rē). Amusing, light compositions.

Plaqué, *Fr.* (plä-*kā*). Struck together. . . . Un accord plaqué, an unbroken chord.

Plaquer, *Fr.* (plä-kā). To strike at once.

Plärren, *Ger.* (*plār*-r'n). To sing monotonously; to sing with a hoarse or cracked voice.

Plauso, *It.* (plä-oo-zō). Applause.

Plus, *Fr.* (plü). More.

Plus animé, *Fr.* (plü sä-nē-mā). With more animation.

Plus lentement, *Fr.* (plü länɴt-mänɴ). Slower, more slowly.

Pochettino, *It.* (pō-kĕt-*tē*-nō). }
Pochétto, *It.* (pō-*kĕt*-tō). } A little.
Pochíno, *It.* (pō *kē*-nō). }

Pochissímo, *It.* (pō-kēs-*sē*-mō). As little as possible.

Póco, *It.* (*pō*-kō). Little.

Póco a póco, *It.* (pō-kō ä pō-kō). Little by little.

Poggiáto, *It.* (pŏd-jē-*ä*-tō). Leaned or dwelt upon.

Pói, *It.* (*pō*-ē). Then, thereafter.

Poi a poi, *It.* (pō-ē ä pō-ē). By degrees.

Point, *Fr.* (pwänɴ). A dot.

Point d'arrêt, de repos, *Fr.* (pwänɴ d'âr-rât dŭh rĕpō). A hold. 𝄐

Point final, *Fr.* (pwänɴ fē-*näl*). The last pause.

Point d'orgue, *Fr.* (pwänɴ d'ōrg). A hold; a cadenza; an organ-point.

Points détachés, *Fr.* (pwänɴ dā-*tä*-shā). Staccato-dots.

Pointe, *Fr.* (pwänt). 1. In violin-playing, the head or point of the bow. 2. In organ-playing, the toe.

Pointer, *Fr.* (pwänɴ-tā). To perform staccato.

Polyphonic (pŏl-ĭ-*fŏn*-ĭk). Contrapuntal.

Polyphony (pō-*lĭf*-ō-ny). Counterpoint in the broadest sense.

Pompös, *Ger.* (pōm-*pös*). Pompous, majestic.

Pomposaménte, *It.* (pŏm-pō-zä-*mān*-tĕ). In a pompous or dignified style.

Pompóso, *It.* (pŏm-*pō*-zō). Dignified, pompous.

Ponctuation, *Fr.* (pŏnc-tü-ä-tsē-ŏnɴ). Phrasing.

Ponctuer, *Fr.* (pŏnc-tü-ā). To phrase.

Ponderóso, *It.* (pŏn-dĕ-*rō*-zō). Heavy; strongly marked.

Ponticéllo, *It.* (pŏn-tē-*chāl*-lō). The bridge of a bow-instrument. . . . Sul ponticello, play near the bridge.

Portaménto, *It.* (pōr-tä *mān*-tō). A gliding from one tone to another, which causes the intermediate tones to be slightly heard.

Portándo la vóce, *It.* (pōr-*tän*-dō lä *vō*-chĕ). Sustaining the voice; similar to portamento.

Portáta, *It.* (pōr-*tä*-tä). Staff.

Portáto, *It.* (pōr-*tä*-tō). Sustained.

Port de voix, *Fr.* (pōrt dŭh vwä). Portamento.

Porter la voix, *Fr.* (pōr-tā lä vwä). To carry the voice.

Posáto, *It.* (pō-*zä*-tō) Dignified.

Posément, *Fr.* (pō-*zā*-mänɴ). Posato.

Poser la voix, *Fr.* (pō-sā-lä vwä). A direction for a vocalist to attack the tone with clearness and precision.

Positif, *Fr.* (pō-zē-*tēf*). Choir-organ.

Possíbile, *It.* (pŏs-*sē*-bē-lĕ). Possible.

Postlude (*pōst*-lūde). An organ composition played at the close of a church-service; an after-piece.

Pot-pourri, *Fr.* (pōt-poor-rē). A medley.

Poussé, *Fr.* (poos-sā). Up-bow.

Prächtig, *Ger.* (*prākh*-tĭg). Grand, majestic, dignified.

Pralltriller, *Ger.* (prä̈l-trĭl-lĕr). An inverted mordent.

Präludium, *Ger.* (prā-*loo*-dĭ-oom). A prelude.

Präzis, *Ger.* (*prā*-tsis). Exact, precise.

Precentor. Director of a choir.

Precipitaménte, *It.* (prā-chē-pē-tä-*mān*-tĕ). Hurriedly.

Precipitándo, *It.* (prā-chē-pē-*tän*-dō). Hurrying.

Precipitáto, *It.* (prā-chē-pē-*tä*-tō). Hurried.

Precipitazióne, *It.* (prā-chē pē-tät-sē-*ō*-nĕ). Precipitation.

Precipité, *Fr.* (prā-*sē*-pī-tā). Hurried.

Precipitóso, *It.* (prā-chē-pē-*tō*-zō). Precipitous.

Precisióne, *It.* (prā-chē-zē-*ō*-nĕ). Precision.

Precíso, *It* (prā-*chē*-zō). Precise, exact.

Prefacion, *Sp.* (prā-fä-thē-*ōn*). }
Prefazióne, *It.* (prā-fä-tsē-*ō*-nĕ). } Preface, introduction.

Preghiéra, *It.* (prā-ghē-*ā*-rä). A prayer. The title of modern *salon* pieces of a devotional character.

Prelude, *Fr.* (prĕ-lüd). }
Preludío, *It.* (prĕ-loo-*dē*-ō). } A prelude. Any piece of music forming an introduction to a more extended movement, as an overture to an oratorio or opera; also the title of certain pieces for the organ and pianoforte which are independent compositions.
Præludium, *Lat.* (prĕ-*lū*-dĕ-ŭm). }

Premier, *Fr.* (prĕm-ĭ-*ā*). First.

Premier dessus, *Fr.* (prĕm-ĭ-*âr* dĕs-sü). First soprano.

Première, *Fr.* (prĕm-ē-*ār*). The first public performance of a work.

Première fois, *Fr.* (prĕm-ē-*ār* fwä). First time.

Présa, *It.* (*prā*-sä). The signs indicating the entrance of each part of a canon 𝄋. 𝄋: 𝄋. + ✳.

Pressante, *It.* (prĕs-*sän tĕ*). Accelerando, stringendo.

Pressez, *Fr.* (*prĕs*-sā). Accelerando, stringendo.

Pressez un peu, *Fr.* (prĕs-sā änɴ pô). Poco stringendo.

Pressirend, *Ger.* (prĕs-*si*-rĕnd). Hurrying.

Pressure tone. A sudden crescendo.

Prestaménte, *It.* (prĕs-tä-*mān*-tĕ). Hurriedly.

Prestézza, *It.* (prĕs-*tät*-sä). Rapidity.

Prestissimaménte, *It.* (prĕs-tēs-sē-mä-*mān*-tĕ). }
Prestissimo, *It.* (prĕs-*tēs*-sē-mō). } As fast as possible.

Présto, *It.* (*prās*-tō). Fast. Faster than allegro but slower than prestissimo.

Présto assái, *It.* (*prās*-tō äs-*sä*-ē). Very fast.

Présto, ma non tróppo, *It.* (*prās*-tō mä nŏn *trŏp*-pō). Quick, but not too much so.

Prière, *Fr.* (prē-*ār*). Prayer.

Príma, *It.* (*prē*-mä). First.

Príma donna, *It.* (*prē*-mä *dŏn*-nä). The leading soprano singer in an opera.

Príma párte repetita, *It.* (*prē*-mä *pär*-tĕ rā-pĕ-*tē*-*tä*). Repeat the first part.

Príma vísta, *It.* (*prē*-mä *vēs*-tä). At first sight.

Príma vólta, *It.* (*prē*-mä *vōl*-tä). The first time.

Prime. The key-note or tonic. Also used in place of unison.

Primo, *It.* (prē-mō). First.
Prim-töne, *Ger.* (*prĭm-tö*-nĕ). Fundamental tones, or notes.
Principalménte, *It.* (prēn-chē-päl-*mān*-tĕ). Principally, chiefly.
Principal voices. Soprano and bass.
Principiánte, *It.* (prēn-chē-pē-*ān*-tĕ). A beginner.
Princípio, *It.* (prēn-*chē*-pē-ō). First time, beginning.
Prise du sujet, *Fr.* (prēs dü sü-zhā). Entrance of the subject.
Proasma. An introduction, or a short symphony.
Probe, *Ger.* (*prō*-bĕ). Rehearsal.
Producénte, *It.* (prō-doo-*chān*-tĕ). Fifth tone of the scale.
Promptement, *Fr.* (prŏn*ḥt*-mänḥ). Promptly, quickly.
Prónta, *It.* (*prōn*-tä). Prompt.
Prontaménte, *It.* (prōn-tä-*mān*-tĕ). Promptly.
Prónto, *It.* (*prōn*-tō). Prompt.
Pronunziáto, *It.* (prō-noon-tsē-*ä*-tō). Pronounced.
Propósta, *It.* (prō-*pōs*-tä). The subject of a fugue.
Proslambanomenos, *Gr.* (prŏs-lăm-bă-*nŏm*-ē-nŏs). The lowest note in the Greek system.
Próva, *It.* (*prō*-vä). Rehearsal.
Pulse. A beat or accent.
Punctum, *Lat.* (*pŭnk*-tŭm). An ancient name for note, meaning point.
Punctum contra punctum, *Lat.* (*pŭnk*-tŭm *kŏn*-trä *pŭnk*-tŭm). Point against point; counterpoint.
Punctus, *Lat.* (*pŭnk*-tŭs). } A dot, a point.
Punkt, *Ger.* (poonkt). }
Púnta, *It.* (*poon*-tä). The point, the top.
Púnta d' arco, *It.* (*poon*-tä d'är-kō). Point of the bow.
Puntáto, *It.* (poon-*tä*-tō). Pointed, detached, staccato'd.
Púnto, *It.* (*poon*-tō). A dot, a point.

Quadrat, *Ger.* (kwäd-*rät*). A natural ♮.
Quadráto, *It.* (kwäd-*rä*-tō). The note B in the natural or diatonic scale.
Quadricinium, *Lat.* (kwäd-rī-*sĭn*-ĭ-ŭm). } A quartet; a composition in four parts.
Quadripartíte, *Fr.* (käd-rí-pär-*tēt*). }
Quádro, *It.* (kwä-drō). A natural ♮.
Quadruple counterpoint. Counterpoint in four invertible parts.
Quadruple time. Four beats to a measure.
Quadruplet. A group of four equal notes intended to be performed in the time of three or six of the same time-value in the regular rhythm.
Quart. The interval of a fourth.
Quarta, *Lat.* and *It.* (*quär*-tä). } Fourth. The interval of a fourth.
Quarte, *Ger.* (*kwär*-tĕ), and *Fr.* (kärt). }
Quasi, *Lat.* and *It.* (*quä*-zē). Nearly, like; as if.
Quatre, *Fr.* (kätr). } Four.
Quáttro, *It.* (*kwät*-trō). }
Quatuor, *Fr.* (*kä*-tŭ-ŏr). A quartet.
Quaver. An eighth note.
Quedo, *Sp.* (*kā*-dō). Softly, gently, in a low voice.
Querimonia, *Lat.* (quĕr-ī-*mō*-nĭ-ä) A religious cantata of a dolorous cast.
Quésta, *It.* (*kwās*-tä). } This, that.
Quésto, *It.* (*kwās*-tō). }
Queue, *Fr.* (küh). "Tail." Stem of a note. A tailpiece.
Quiebro, *Sp.* (kē-ā-brō). A shake or trill.
Quiéto, *It.* (kwē-*ā*-tō). Quiet, calm.
Quinque, *Lat.* (quĭn-quĕ). Five.
Quint, *Lat.* (quĭnt). The interval of a fifth.
Quint-absatz, *Ger.* (kwĭnt-äb-sätz). An imperfect cadence on the dominant.
Quinte, *Fr.* (kän*ḥt*) and *Ger.* (kwĭn-tĕ). Fifth. Treble.
Quint-saite, *Ger.* (kwĭnt-sī-tĕ). The E-string of a violin.
Quintuor, *Fr.* (kwin-tü-ŏr). A quintet.
Quintuple time. Five beats to a measure.
Quintuplet. A group of five notes of the same time-value performed in the time of four of the same kind in the regular rhythm.

Rábbia, *It.* (*räb*-bē-ä). Rage, frenzy.
Raccourcir, *Fr.* (rä-coor-sēr). To abridge.
Racleur, *Fr.* (rä-klür). A poor player.
Raddolcéndo, *It.* (räd-dōl-*chān*-dō). } Gradually softer, calmer.
Raddolcénte, *It.* (räd-dōl-*chān*-tĕ). }
Raddolcíto, *It.* (räd-dōl-*chē*-tō). Calmer, gentler.
Raddoppiáte nóte, *It.* (räd-dōp-pē-*ä*-tĕ *nō*-tĕ). Repeated or reiterated notes.
Raggione, *It.* (räd-jē-*ō*-nĕ). Ratio, proportion.
Rallentaménto, *It.* (räl-lĕn-tä-*mān*-tō). } Gradually slackening the tempo.
Rallentándo, *It.* (räl-lĕn-*tän*-dō). }
Rallentáto, *It.* (räl-lĕn-*tä*-tō). } To grow slower.
Rallentáre, *It.* (räl-lĕn-*tä*-rĕ). }
Range. Compass of a voice or instrument.
Rapidaménte, *It.* (rä-pē-dä-*mān*-tĕ). Rapidly.
Rapidita, *It.* (rä-*pē*-dē-tä). Rapidity.
Rápido, *It.* (*rä*-pē-dō). Rapid.
Rasch, *Ger.* (räsh). Swift, rapid.
Rascher, *Ger.* (*räsch*-ĕr). Faster.
Rattenéndo, *It.* (rät-tĕ-*nān*-dō). } See Ritenuto.
Rattenúto, *It.* (rät-tĕ *noo*-tō). }
Rattézza, *It.* (rät-*tät*-sä). Speed, rapidity.
Raucedíne, *It.* (rä-oo-chĕ-*dē*-nē). Hoarseness.
Rauco, *It.* (rä-oo-kō). Hoarse, harsh.
Rauh, *Ger.* (rowh). Rough, harsh, hoarse.
Rauscher, *Ger.* (*row*-schĕr). A rapidly repeated note.
Ravvivándo il tempo, *It.* (räv-vē *vän*-dō ēl *tām*-pō). Accelerating the tempo.
Ray. This syllable is used in place of Re in the Tonic Sol-fa system.
Re. Name of the note D in Italy, etc. The second degree of the diatonic scale.
Ré bémol, *Fr.* (rā bā-mōl). The note D♭.
Recht, *Ger.* (rĕkht). Right.
Recht hand, *Ger.* (rĕkt händ). Right hand.
Récit, *Fr.* (rā-sē). An instrumental or vocal solo part. The principal part in a piece of concerted music.
Recitándo, *It.* (rā-chē-*tän*-dō). } In declamatory style.
Recitánte, *It.* (rā-chē-*tän*-tĕ). }
Récitant, *Fr.* (rā-sē-tän*ḥ*). } One who plays or sings a solo.
Récitante, *Fr.* (rā-sē-tänte). }
Récitatif, *Fr.* (rā-sē-tä-*tēf*). } Recitative; musical declamation; a style of declamatory singing.
Recitatív, *Ger.* (rĕt-sĭ-*tä*-tĭf). }
Recitatívo, *It.* (rā-chē-tä-*tē*-vō). }
Recte, *Lat.* (*rĕk*-tĕ). Right, straight, forward.
Recte et retro, *Lat.* (rĕk-tĕ ĕt *rā*-trō). Forward, then backward; the subject or melody reversed, note for note.
Ré dièse, *Fr.* (rā dī-*āz*). The note D♯.

Redíta, *It.* (rā-*dē*-tä). } A repeat.
Reddíta, *It.* (rĕd-*dē*-tä). }

Redondilla, *Sp.* (rā-dōn-dēl-yä). A roundelay.

Redublicáto, *It.* (rĕ-doob-lē-*kä*-tō). Redoubled.

Réfléchir, *Fr.* (rā-flā-shēr). To throw back, to reverberate.

Refrain. A burden or chorus sung after each stanza of a song.

Registration. The theory and practice of using and combining the various stops of an organ.

Rein, *Ger.* (rīn). Pure, clear, perfect.

Reine stimme, *Ger.* (*rī*-nĕ *shtĭm*-mĕ). Clear voice.

Religiosaménte, *It.* (rĕ-lē-jē-ō-zä-*mān*-tĕ). } Devoutly, re-
Religióso, *It.* (rĕ-lē-jē *ō*-zō). } ligiously.

Rentrée, *Fr.* (räⁿ*h*-trā). Reëntrance of a part or theme.

Renvoi, *Fr.* (räⁿ*h*-vwä). The sign 𝄋 denoting that the performer must return to and repeat from a similar sign.

Repercotiménto, *It.* (rĕ-pâr-kō-tē-*mān*-tō). } Repercussion;
Repercussio, *Lat.* (rĕp-ĕr-*kŭs*-sī-ō). } the answer, in a fugue.

Repercussion. A frequent repetition of the same sound.

Répercuter, *Fr.* (ā-pĕr-*kü*-tā). To repercuss, to reverberate.

Repetatur, *Lat.* (rĕp-ĕ-*tā*-tŭr). Let it be repeated.

Repetieren, *Ger.* (rā-pā-tē-r'n). To repeat.

Repetizióne, *It.* (rĕ-pā-tē-tsē-*ō*-nĕ). Repetition.

Réplica, *It.* (*rā*-plē-kä). A repeat.

Replicáto, *It.* (rĕp-lē-*kä*-tō). Repeated.

Replicate. A tone one or more octaves higher or lower than a given tone.

Replicazióne, *It.* (rĕp lē-kä-tsē-*ō*-nĕ). Repetition.

Répondre, *Fr.* (rā-pŏⁿ*h*dr). To respond, to answer.

Répons, *Fr.* (rā-pŏⁿ*h*s). An answer.

Réponse, *Fr.* (rā-pŏⁿ*h*s). An answer.

Repos, *Fr.* (rŭh-pō). A pause.

Reprise, *Fr.* (rŭh prēz). The burden of a song; a repetition, or return, to some previous part.

Requiebro, *Sp.* (rā-kē-*ā*-brō). A trill of the voice.

Resolúto, *It.* (rĕs-ō-*loo*-tō). See Risoluto.

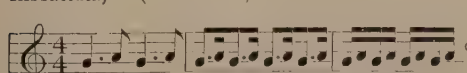
Rest. The characters used to indicate an interval of silence between two tones.

Réveille, *Fr.* (rā *vā*-yĕ). Awaking; signal given by drum to soldiers at dawn.

Rhythm. Rhythm in music is tone-movement produced by sounding in succession two or more tones of equal or unequal time-value. One tone cannot of itself produce rhythm, but being followed by one or more tones there results a rhythm exhibiting the relative time-value of the tones employed. When a motive or group is repeated many times in the course of a composition and at regular intervals, the resulting rhythm is called by the name of the composition in which it is used; as the rhythms peculiar to the march, waltz, polka, mazurka, and polonaise. Musical rhythm may or may not be accented; music for the organ, for example, does not admit of accent.

Ribattiménto, *It.* (rē-bät-tē-*mān*-tō). Repercussion, reverberation.

Ribbattúta, *It.* (rĭb-bät-*too*-tä). A kind of trill.



Ricantáre, *It.* (rē-kän-*tä*-rĕ). To sing again.

Ricordánza, *It.* (rē-kŏr-*dän*-tsä). Remembrance, recollection.

Rígo, *It.* (*rē*-gō). The staff.

Rigóre, *It.* (rē-*gō*-rĕ). Rigor, strictness.

Rilasciándo, *It.* (rē-lä-shē-*än*-dō). } Rallentando.
Rilasciánte, *It.* (rē-lä-shē-*än*-tĕ). }

Rimetténdo, *It.* (rē-mĕt-*tān*-dō). Holding back, or retarding the tempo.

Rinforzaménto, *It.* (rēn-fŏr-tsä-*mān*-tō). Reinforcement.

Rinforzándo, *It.* (rēn-fŏr-*tsän*-dō). Strengthening, emphasizing.

Rinforzáre, *It.* (rēn-fŏr-*tsä*-rĕ). To reinforce; to emphasize.

Rinforzáto, *It.* (rēn-fŏr-*tsä*-tō). With special emphasis, when used for a single tone or chord; sudden increase in loudness, when used for a short passage or phrase.

Rinfórzo, *It.* (rēn-*fōr* tsō). Strengthened.

Rintronáto, *It.* (rēn-trō-*nä*-tō). Resounded, reëchoed.

Ripetizióne, *It.* (rē-pĕ-tē-tsē-*ō*-nĕ). Repetition.

Ripiéno, *It.* (rē-pē-*ā*-nō). Equivalent to Tutti.

Ripigliáre, *It.* (rē-pēl-yē-*ä*-rē). To resume.

Ripigliándo, *It.* (rē-pēl-yē-*än*-dō). Resuming.

Riposataménte, *It.* (rē-pō-zä-tä-*mān*-tĕ). Restfully.

Riposáto, *It.* (rē-pō-*zä*-tō). Restful.

Ripóso, *It.* (rē-*pō*-zō). Rest, repose.

Riposta, *It.* (rē-*pōs*-tä). Repeat.

Riprendére, *It.* (rē-prĕn-*dā*-rē). To resume.

Riprendéndo, *It.* (rē-prĕn-*dān*-dō). Resuming.

Riprésa, *It.* (rē-*prā*-zä). A reprise or repeat. The sign 𝄋

Risentíto, *It.* (rē-sĕn-*tē*-tō). Vigorous, energetic.

Risolutaménte, *It.* (rē-zō-loo-tä *mān*-tĕ). With energy.

Risolutézza, *It.* (rē-zō-loo-*tät*-sä). Resolution.

Risolutíssimo, *It.* (rē-zō-loo-*tēs*-sē-mō). Very energetic.

Risolúto, *It.* (rē-zō-*loo*-tō). Energetic, decided.

Risoluzióne, *It.* (rē-zō-loo-tse-*ō*-nĕ). Energy, decision.

Risonánte, *It.* (rē-zō-*nän*-tĕ). Resounding, ringing.

Rispósta, *It.* (rēs-*pōs*-tä). The answer in a fugue; consequent in a canon.

Ristrétto, *It.* (rē-*strāt*-tō). A stretto.

Risvegliáre, *It.* (rēs-vāl-yē-*ä*-rĕ). To awaken, to animate.

Risvegliáto, *It.* (rēs-vāl-yē-*ä*-tō). Animated, lively.

Ritardándo, *It.* (rē-tär-*dän*-dō). Decreasing in speed.

Ritardáto, *It.* (rē-tär-*dä*-tō). Decreased in speed.

Ritárdo, *It.* (rē-*tär*-dō). Decrease in speed.

Riteném̃do, *It.* (rē-tĕ-*nän*-dō). } Holding back.
Ritenénte, *It.* (rē-tĕ-*nän*-tĕ). } The same as Rallentando.

Ritenúto, *It.* (rē-tä-*noo*-tō). Held back, in slower tempo. Much used incorrectly for rallentando

Rítmo, *It.* (*rēt*-mō). Rhythm.

Rítmo di due battúte, *It.* (*rēt*-mō dē doo-ĕ bät-*too*-tĕ). A two-measure rhythm.

Rítmo di tre battúte, *It.* (*rēt*-mō dē trā bät-*too*-tĕ). A three-measure rhythm.

Ritornándo, *It.* (rē-tōr-*nän*-dō). Returning.

Ritornáre, *It.* (rē-tōr-*nä*-rĕ). To return.

Ritornélle, *It.* (rē-tōr-*nāl*-lĕ). } An instrumental prelude,
Ritornéllo, *It.* (rē-tōr-*nāl*-lō). } interlude, or postlude to accompanied vocal works.
Ritournelle, *Fr.* (rē-toor-*nĕl*). } A repeat. The refrain of a song.

Riverberaménto, *It.* (rē-vâr-bĕ-rä-*man*-tō). Reverberation.

Rivérso, *It.* (rē-*vâr*-sō). Reversed. Retrograde.

Rivolgiménto, *It.* (rē-vōl-yē-*mān*-tō). Inversion of the parts in invertible counterpoint.

Rivoltáto, *It.* (rē-vōl-*tä*-tō). Inverted.

Rivólto, *It.* (rē *vōl*-tō). Inversion.

Robáto, *It.* (rō-*bä*-tō). Robbed, borrowed.

Robustaménte, *It.* (rō-boos-tä *mān*-tĕ). Boldly and firmly.

Robústo, *It.* (rō-*boos*-tō). Bold and firm.

Roccóco, *It.* (rō-*kō*-kō). Odd, old-fashioned.

Roche, *It.* (*rō*-kĕ). Hoarse, rough-sounding.

Rochézza, *It.* (rō-*kät*-sä). Hoarseness.

Róco, *It.* (*rō*-kō). Hoarse.

Rocóco, *It.* (rō-*kō*-kō). Rococo.

Rohr-werk, *Ger.* (*rōr*-vârk). Reed-work. A term given to all of the reed stops in an organ.

Ronde, *Fr.* (rōnd). A whole note.

Ronquedad, *Sp.* (rŏn-kĕ-*dăd*). Hoarseness.

Ronzaménto, *It.* (rōn-tsä-*mān*-tō). Humming, buzzing.

Root. The note on which a chord is constructed, and from which the chord receives its letter-name. For example, in the chord of G, the root is G.

Rosália, *It.* (rō-*säl*-yä).
Rosalie, *Ger.* (rō-*zä*-lē). } A melodic form composed of a figure or phrase repeated several times, each repetition taking place on the next degree above the preceding one; the repetitions may also occur on any degree.

Rossignóler, *Fr.* (rō-sēn-*yō*-lā). To imitate the song of the nightingale.

Rotóndo, *It.* (rō-*tōn*-dō). Full, round. Pertaining to tone.

Rótte, *It.* (rōt-tĕ). Broken, interrupted.

Roucouler, *Fr.* (roo-koo-*lā*). To coo, to trill, to quaver.

Roulade, *Fr.* (roo-*lăd*). A grace composed of an arpeggio or run joining one principal tone to another. A flourish in vocal or instrumental music.

Rovérscio, *It.* (rō *vâr*-shē-ō).
Rovérsio, *It.* (rō-*vâr*-sē-ō). } Reversion.

Rovesciaménto, *It.* (rō-vä-shē-ä-*mān*-tō). Inversion. Reversion. Contrary motion. Retrograde motion.

Rovescio, *It.* (rō-*vä*-shē-ō). Imitation by contrary motion. The term is also given to a piece of music so constructed that it may be performed backwards.

Rubáto, *It.* (roo-*bä*-tō). Changing the time-value of notes comprising any part of a composition. The term really indicates a free use of accelerando and rallentando according to the taste of the performer; the less important melody notes being accelerated while those most prominent are prolonged.

Rückgang, *Ger.* (*rük*-gängk). Return. The term is used to indicate a transition from one melody or theme to the repetition of a previous one.

Rückung, *Ger.* (*rük*-oongk). Syncopation. Enharmonic change (*enharmonische Rückung*).

Rückweiser *Ger.* (*rük*-vī-sĕr). The sign 𝄐.

Ruhepunkt, *Ger.* (*roo* hĕ-*poonkt*).
Ruhezeichen, *Ger.* (*roo*-hĕ-*tsī*-k'n). } A pause.

Ruhig, *Ger.* (*roo*-hĭg). Calm, tranquil, quiet.

Rührung, *Ger.* (rüh-roongk). Emotion.

Run. A rapid scale-passage. In vocal music the term is given to such a passage sung to one syllable.

Rundgesang, *Ger.* (*roond*-ghĕ-*sängk*). A vocal solo with refrain for chorus.

Russe, *Fr.* (rüss). Russian.

Rústico, *It.* (*roos*-tē-kō). Rustic, rural.

Ruvidaménte, *It.* (roo-vē-dä-*mān*-tĕ). Coarsely, roughly.

Ruvído, *It.* (roo-*vē*-dō). Coarse, rough.

Sacred music. Church music.

Saengerfest, *Ger.* (*säng*-ĕr-*fĕst*). A festival among the Germans of a musical and social character.

Sággio, *It.* (*säd*-jē-ō). An essay, a trial.

Saite, *Ger.* (*sī*-tĕ). A string.

Saiten-bändiger, *Ger.* (*sī*-t'n-*bĕn*-dĭ-ghĕr). A musician.

Saitenchor, *Ger.* (*sī*-t'n-kōr). Two or more strings tuned in unison.

Saiteninstrumente, *Ger.* (*sī*-t'n-ĭn-shtroo-*mĕn*-tĕ). Stringed instruments.

Salmeggiaménto, *It.* (säl-mād-je-ä-*mān*-tō). Psalmody.

Salmo, *It.* (säl-mō). Psalm.

Salonflügel, *Ger.* (sä-lŏn-*flü*-g'l). Parlor grand (pianoforte).

Salonstück, *Ger.* (sä-lŏn-shtük). A salon or parlor composition.

Saltáto, *It.* (säl-*tä*-tō). A variety of the "springing bow" in violin-playing.

Salterétto, *It.* (säl-tĕ-*rät*-tō). A term given to the rhythm

Sálto, *It.* (*säl*-tō). A leap or skip.

Samlung, *Ger.* (*säm*-loongk). A collection of airs.

Sanft, *Ger.* (sänft). Low, soft.

Sanftheit, *Ger.* (*sänft*-hīt). Softness, smoothness, gentleness.

Sänftig, *Ger.* (*sänf*-tĭg). Soft, gentle.

Sanftmuth, *Ger.* (*sänft*-moot). Softness, gentleness.

Sans, *Fr.* (sänh). Without.

Satz, *Ger.* (sätz). Subject. Theme.

Saut, *Fr.* (sō). Skip.

Sbálzo, *It.* (*sbäl*-tsō). A leap or skip.

Sbalzáto, *It.* (sbäl-*tsä*-tō). Impetuously.

Sbárra, *It.* (*sbär*-rä). Bar.

Sbárra dóppia, *It.* (*sbär*-rä *dŏp*-pē-ä). Double bar.

Scagnéllo, *It.* (skän-*yāl*-lō). Bridge.

Scála, *It.* (*skä*-lä). A scale.

Scald. A Scandinavian bard.

Scale. The succession of tones in their regular order comprising any major or minor key; chromatic 8, the name of the series of half-tones beginning with any given note and proceeding by half-tones to the octave of that note.

Scale-degree. A degree of a scale, counting upwards from the keynote.

Scampanare, *It.* (skäm-pä-*nä*-rē). To chime bells.

Scampanio, *It.* (skäm-*pä*-nē-ō). Christmas chimes; chimes.

Scemándo, *It.* (shĕ-*mān*-dō). See Diminuendo.

Scéna, *It.* (*shā*-nä). A division in an act of a dramatic work. Also the name of a vocal solo of dramatic character.

Scéna da cámera, *It.* (*shā*-nä dä *kä*-mĕ-rä). Chamber music.

Scenário, *It.* (shĕ-*nä*-rē-ō). Plot of a dramatic work.

Scenarium. An opera-libretto containing the dialogue and directions for the performers.

Scene. See Scena.

Schäfer-gedicht, *Ger.* (*shā*-fĕr-ghĕ-*dĭkht*.) Idyl, eclogue, pastoral.

Schäferlied, *Ger.* (*shā*-fĕr-*lēd*). Shepherd's song; a pastoral ditty.

Schäfer-pfeife, *Ger.* (*shā*-fĕr *pfī*-fe). Shepherd's pipe.

Schalkhaft, *Ger.* (*schälk*-häft). Sportive, roguish.

Schall, *Ger.* (shäll). Sound, resonance.

Schallbecken, *Ger.* (*shäll-bĕk*-ĕn). Cymbals.

Schallhorn, *Ger.* (*shäll*-hōrn). Horn, cornet, trumpet.

Schallstab, *Ger.* (*shäll*-shtäb). Triangle.

Schanzune, *Ger.* (shän-*tsoon*-ĕ). A corruption of chanson.

Schaurig, *Ger.* (*show*-rĭg). Weirdly.

Schauspiel, *Ger.* (*show*-shpēl). Drama, dramatic piece.

Scherzándo, *It.* (skâr-*tsän*-dō).
Scherzánte, *It.* (skâr-*tsän*-tĕ).
Scherzévole, *It.* (skâr-*tsā*-vō-lĕ).
} In a light, playful style.

Scherzhaft, *Ger.* (shĕrts-häft). Sportive. Burlesque.

Scherzino, *It.* (*skâr*-tsē-nō).
Scherzo, *It.* (*skâr*-tsō).
} Titles given to various compositions of a lively character.

Scherzóso, *It.* (skâr-*tsō*-zō). See Scherzando.

Schiettaménte, *It.* (skē-ät-tä-*mān*-tĕ).
Schiétto, *It.* (skē-*ät*-tō).
} Simple, plain.

Schlacht-gesang, *Ger.* (*shläkht*-ghĕ-*sängk*).
Schlacht-lied, *Ger.* (*shläkht*-lēd).
} War-song.

Schlag, *Ger.* (shläg). A stroke, beat, or pulse.

Schlag instrument, *Ger.* (shläg ĭn-stroo-*mĕnt*). An instrument of percussion.

Schlecht, *Ger.* (shlĕkt). Bad, weak.

Schleif-bogen, *Ger.* (*shlīf*-bō-g'n). A slur.

Schleifen, *Ger.* (*shlī*-f'n). To slur.

Schleifer-zeichen, *Ger.* (*shlī*-fĕr-*tsī*-khĕn). A slur.

Schleppen, *Ger.* (*shlĕp*-pĕn). To retard, or drag.

Schleppend, *Ger.* (*shlĕp*-pĕnd). Retarding, dragging.

Schluss, *Ger.* (shloos). End, close, cadence.

Schluss-chor, *Ger.* (*shloos*-kōr). Final chorus.

Schluss-fall, *Ger.* (*shloos*-fäll). A cadence. [cadence.

Schluss-kadenz, *Ger.* (*shloos-kä*-dĕnts). Final or closing

Schluss-note, *Ger.* (*shloos*-nōt). Final note.

Schluss-reim, *Ger.* (*shloos*-rīm). Refrain.

Schluss-satz, *Ger.* (*shloos*-sätz). Concluding movement.

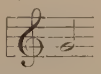
Schluss-striche, *Ger.* (*shloos*-shtrĭkh-e). Double-bar.

Schluss-stück, *Ger.* (*shloos*-shtük). Concluding piece. Finale.

Schluss-zeichen, *Ger.* (*shloos-tsī*-khĕn). The double-bar. The hold 𝄐.

Schlüssel, *Ger.* (*shlüs*-s'l). A clef.

Schlüssel-G, *Ger.* (*shlüs*-s'l-G). The note g¹ on the second line of the treble-clef.



Schmachtend, *Ger.* (*shmäkh*-tĕnd). Languishing.

Schmeichelnd, *Ger.* (shmī-kĕln'd). In a flattering, coaxing style.

Schmelzend, *Ger.* (*shmĕl*-tsĕnd). Melting.

Schmerz, *Ger.* (shmĕrts). Grief, sorrow.

Schmerzhaft, *Ger.* (*shmĕrts*-häft). Sorrowful, dolorous.

Schmerzhaftigkeit, *Ger.* (*shmĕrts*-häf-tĭg-kīt). Sorrowfulness.

Schmerzlich, *Ger.* (*shmĕrts*-lĭkh). Sorrowful, plaintive.

Schmerzlichkeit, *Ger.* (*shmĕrts*-lĭkh-kīt). Dolorousness.

Schmetterling, *Ger.* (*shmĕt*-tĕr-lĭng). "Butterfly." A name given to various instrumental compositions of light and playful character written mostly for the piano.

Schnarr-bass, *Ger.* (*shnärr*-bäss). The drone bass.

Schnarr-werk, *Ger.* (*shnärr*-vârk). The reed stops of an organ, or a reed stop.

Schnell, *Ger.* (shnĕll). Fast, rapid.

Schneller, *Ger.* (shnĕl-lĕr). Faster; also an inverted mordent. 𝆔

Schollrohr, *Ger.* (shōll-rōr). Trumpets, bugles, brass wind instruments.

Schreibart, *Ger.* (*shrī*-bärt). Style.

Schreiend, *Ger.* (*shrī*-ĕnd). Strident, shrill, screaming.

Schreiwerk, *Ger.* (*shrī*-vârk). Shrill-work; acute, or mixture stops.

Schrittmässig, *Ger.* (*shrĭt-mās*-sĭg). Moderate in pace.

Schusterfleck, *Ger.* (*shoos*-tĕr-*flĕk*). Rosalia.

Schwach, *Ger.* (shväkh). Soft, weak.

Schwächer, *Ger.* (*shvā*-kĕr). Softer.

Schwächer taktteil, *Ger.* (*shvā*-kĕr täk-tīl). The weak beat.

Schwärmer, *Ger.* (shvär-mĕr). A rauscher (a rapidly repeated note).

Schwebung, *Ger.* (shvĕ-boongk). In musical acoustics, a Beat. Similar to Tremulant.

Schweigen, *Ger.* (*shvī*-ghĕn). To be silent.

Schweigezeichen, *Ger.* (*shvī*-ghĕ-*tsī*-khĕn). A rest.

Schwellen, *Ger.* (shvĕl-l'n). To increase.

Schwellton, *Ger.* (shvĕl-tŏn). Messa di voce.

Schwer, *Ger.* (shvâr). Heavy, difficult.

Schwer-müthig, *Ger.* (*shvâr-mü*-tĭg). Sad, melancholy.

Schwindend, *Ger.* (*shvĭnd*-ĕnd). Dying away. Morendo.

Schwingung, *Ger.* (*shvĭng*-oongk). Vibration of a string.

Schwungvoll, *Ger.* (*shvoong*-fōl). With swing and passion.

Scintillánte, *It. and Fr.* (shĭn-tīl-*län*-tĕ). Brilliant.

Sciólta, *It.* (shē-*ōl*-tä). Free, agile.

Scioltaménte, *It.* (shē-ōl-tä-*mān*-tĕ). Freely, fluently.

Scioltézza, *It.* (shē-ōl-*tät*-sä). Freedom, fluency.

Sciólto, *It.* (shē-*ōl*-tō). Free.

Scordáto, *It.* (skŏr-*dä*-tō). Out of tune.

Score. The various parts of an instrumental or vocal com position, written on separate staves, and placed under each other to facilitate reading.

Scoring. See instrumentation.

Scorréndo, *It.* (skŏr-*rān*-dō).
Scorrévole, *It.* (skŏr-*rā*-vō-lĕ).
} Glissando. Flowing, gliding.

Scotch snap or catch. The rhythm 𝅘𝅥𝅯𝅘𝅥𝅯. which is peculiar to Scotch melodies.

Sdegnánte, *It.* (sdān-*yän*-tĕ). Angry, passionate.

Sdégno, *It.* (*sdān*-yo). Scorn, indignation.

Sdegnosaménte, *It.* (sdān-yō-zä-*mān*-tĕ). Scornfully.

Sdegnóso, *It.* (sdān-*yō*-zo). Scornful.

Sdrucciolándo, *It.* (sdroot-chē-ō-*län*-dō). Sliding. Glissando.

Sdrucciolére, *It.* (sdroot-chē-ō-*lā*-rĕ). To slide. To play glissando.

Se, *It.* (sā). If.

Se bisógna, *It.* (sā bē-*sōn*-yä). If necessary.

Sec, *Fr.* (sĕk).
Secco, *Fr.* (sĕk-kō).
} Simple, unembellished.

Sechs, *Ger.* (sĕkhs). Six.

Sechsachteltakt, *Ger.* (sĕkhs-äkh-t'l-*täkt*). Six-eight time.

Sechs-saitig, *Ger.* (sĕkhs-*sī*-tĭg). Instrument with six strings.

Sechs-theilig, *Ger.* (*sĕkhs-tī*-lĭg). In six parts.

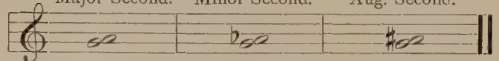
Sechzehntel, *Ger.* (sĕkh-tsĕn-t'l). Semiquavers.

Sechzehntelpause, *Ger.* (sĕkh-tsĕn-t'l-*pow*-zĕ). A semiquaver rest.

Sechsvierteltakt, *Ger.* (sĕkhs-fēr-t'l-*täkt*). Six-four time.

Second. An interval consisting of two conjunct degrees. There are three kinds, — major, minor, and augmented.

Major Second. Minor Second. Aug. Second.



Secónda, *It.* (sā-*kōn*-dä). Second.

Secónda volta, *It.* (sā-*kōn*-dä vōl-tä). Second time.

Seconde dessus, *Fr.* (sā-kŏnd dĕs-sü). Second soprano.

Seconde fois, *It.* (sā-kŏnd fwä). Second time.

Secóndo, *It.* (sā-*kōn*-dō). Second.

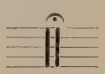
Secóndo partíto, *It.* (sā-*kōn*-dō pär-*tē*-tō). The second part.

Secular music. Music other than that intended for devotional purposes.

Secunde, *Ger.* (sĕ-*koon*-dĕ). A second.

Secundiren, *Ger.* (sĕ-koon-*dēr*-ĕn). To play the second part.

Segnáre, *It.* (sān-*yä*-rĕ). To beat time.

Ségno, *It.* (*sän*-yō). A sign. See Al segno, also Dal segno. The signs used are 𝄋, 𝄌, §, 𝄋. The above terms direct the performer to repeat from the place marked by the sign to the word Fine or to a double-bar marked with a hold. Sometimes only the sign is given.

Ségue, *It.* (*sā*-gwĕ). Follows.

Ségue l'aria, *It.* (*sā*-gwĕ *lä*-rē-ä). The aria follows.

Seguéndo, *It.* (sĕ-*gwän*-dō). } Following.
Seguénte, *It.* (sĕ-*gwän*-*tē*). }

Seguénza, *It.* (sĕ-*guän*-tsä). Sequence.

Ségue sénza interruzióne, *It.* (*sā*-gwĕ *sän*-tsä *ēn*-tĕr-root-tsē-ō-nĕ). Go on without stopping.

Sehnsucht, *Ger.* (*sān*-sookht). Yearning, longing.

Sehnsüchtig, *Ger.* (*sān*-sükh-tĭg). With intense longing.

Sehr, *Ger.* (sâr). Very.

Sehr lebhaft, *Ger.* (sâr *lēb*-häft). Very lively.

Sei, *It.* (sā-ē). Six.

Seitenbewegung, *Ger.* (*sī*-t'n-bĕ-*vā*-goongk). Oblique motion.

Seitensatz, *Ger.* (*sī*-t'n-sätz). A secondary theme in a sonata, rondo, symphony, etc.

S'élever, *Fr.* (*sāl*-ĕ-vā). To ascend in tone.

Semeiotechnie, *Fr.* (sĕ-mā-ō-*tĕk*-nē). A system of musical characters.

Semibreve. A whole note.

Semicorchea, *Sp.* (sĕm-ē-*kōr*-kĕ-ä). A semiquaver.

Semi-croma, *Gr.* (sĕm-ĭ-*krō*-mä). } A semiquaver.
Semi-cróma, *It.* (sĕm-ē-*krō*-mä). }

Semicrotchet. A quaver or eighth note.

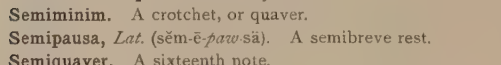
Semidemisemiquaver. A sixty-fourth note.

Semiminim. A crotchet, or quaver.

Semipausa, *Lat.* (sĕm-ē-*paw*-sä). A semibreve rest.

Semiquaver. A sixteenth note.

Semitone. The smallest interval used in modern music. Example.



Semi-tonique, *Fr.* (sĕm-ē-*tō*-nēk). Chromatic.

Semplíce, *It.* (sām-*plē*-chĕ). Simple, unaffected.

Sempliceménte, *It.* (sām-plē-chĕ-*mān*-tĕ). Simply, unaffectedly.

Sémpre, *It.* (*sām*-prĕ). Continually, throughout.

Sensibile, *It.* (sĕn-*sē* bē-lĕ). Expressive, feeling.

Sensibilità, *It.* (ĕn-sē-*bē*-lē-tä). Expression.

Sensibilménte, *It.* (sĕn-sē-bēl-*mān*-tĕ). Expressively.

Sensible, *Fr.* (sänh-*sēbl*). The leading-note. Note sensible is another term for the leading-note.

Sentie, *Fr.* (sänh-*tē*). Expressed, felt.

Sentimentale, *Fr.* (sänh-tē-*mĕn*-tăl). Sentimental.

Sentiménto, *It.* (sĕn-tē-*mān*-tō). Sentiment, feeling.

Sénza, *It.* (*sān*-tsä). Without.

Sénza fiori, *It.* (*sān*-tsä fē-*ō*-rē). Without ornaments, without embellishments.

Sénza réplica, *It.* (*sān*-tsä *rā*-plē-kä). Without repetition.

Se piáce, *It.* (sā pē-*ä*-che). If you please.

Sep-chord. Chord of the seventh.

Septet. } A composition for seven voices
Septett, *Ger.* (sĕp-tĕt). } or instruments.

Septième, *Fr.* (sĕt-ĭ-*ām*). } The interval of the seventh.
Septime, *Ger.* (sĕp-*tē*-mĕ). }

Septimen akkord, *Ger.* (*sĕp*-tĭ-mĕn äk-kōrd). Chord of the seventh.

Septimole, *Ger.* (*sĕp*-tĭ-*mō*-lĕ). } Septuplet.
Septole. }

Septuor, *Fr.* (*sĕp*-tü-ŏr). Septet.

Septuplet. A group of seven notes of equal time-value to be performed in the time of four or six of the same kind in the regular rhythm.

Sequence. The repetition, more than twice in succession, of a motive or group, the repetitions occurring in ascending or descending motion, and by equal intervals.

Seraphine, (*sĕr*-ä-fēn). A species of harmonium.

Serbáno, *It.* (sĕr-*bā*-nō). The serpent, a bass wind instrument.

Serena, *It.* (sĕ-*rā*-nä). An evening song.

Seréno, *It.* (sĕ-*rā*-nō). Calm, serene.

Seria, *It.* (*sā*-rē-ä). } Serious.
Serio, *It.* (*sā*-rē-ō). }

Sérieusement, *Fr.* (sā-rĭ-*üs*-mänh). Seriously.

Serióso, *It.* (sā-rē-*ō*-zō). In a grave, serious style.

Serpeggiándo, *It.* (sĕr-pĕd-jē-*ān*-dō). Gently winding, sliding, creeping.

Serpent. A bass wind instrument.

Serráta, *It.* (sĕr *rä*-tä). A concluding performance.

Sésta, *It.* (*sās*-tä). } Sixth.
Ésto, *It.* (*sās*-tō). }

Sestet, } A sextet.
Sestetto, *It.* (sĕs-*tät*-tō). }

Sestina, *It.* (sēs-*tē*-nä). A sextuplet.

Sestole, *It.* (sĕs-*tō*-lĕ). } A sextuplet.
Sestolet, *It.* (sĕs-*tō*-lĕt). }

Settetto, *It.* (sĕt-*tĕt*-tō). Septet.

Séttima, *It.* (*sät*-tē-mä). Interval of a seventh.

Séttimo, *It.* (*sät*-tē-mō). Seventh.

Setzart, *Ger.* (*sĕts*-ärt). Style of composition.

Setzkunst, *Ger.* (*sĕts*-koonst). Art of composition.

Seul, *Fr.* (sŭl). } Solo, alone.
Seule, *Fr.* (sŭl). }

Severaménte, *It.* (sĕ-vĕr-ä-*mān*-tĕ). Strict interpretation of tempo and expression marks.

Sevérita, *It.* (sĕ-*vā*-rē-tä). Severity, strictness.

Sext. The interval of a sixth.

Sexta, *Lat.* (*sĕx*-tä). Sixth. Interval of a sixth. A sixth part.

Sexte, *Ger.* (*sĕx*-tĕ). A sixth.

Sextet, **Sextett,** *Ger.* (*sĕx*-tĕt). A composition for six voices or instruments.

Sextole, *Lat.* (*sĕx*-tō-lĕ). **Sextolet,** (*sĕx*-tō-lĕt). A sextuplet.

Sextuor, *Fr.* (sĕx-tü-ŏr). Sextet.

Sextuplet. A group of six notes of equal time-value performed in the time of four of the same kind in the regular rhythm.

Séxtus, *Lat.* (*sĕx*-tŭs). A sixth part.

Sfogáto, *It.* (sfo-*gä*-tō). Light, airy. A direction in vocal music meaning that the passage thus marked must be rendered in a light and airy manner.

Sfórza, *It.* (*sfōr*-tsä). Forced, with energy.

Sforzándo, *It.* (sfōr-*tsän*-dō). **Sforzáto,** *It.* (sfōr-*tsä*-tō). The abbreviations of these terms are commonly applied to a single tone or chord, and denote that the notes so marked are to be performed with special stress.

Sforzáre la vóce, *It.* (sfōr-*tsä*-rē lä *vō*-chĕ). To overstrain the voice.

Sfuggíto, *It.* (sfood-*jē*-tō). Avoided, shunned.

Shake. Trill.

Sharp. The sign ♯. The sharp when placed before a note or on a degree of the staff raises its pitch one half-tone.

Si, *It.* (sē). It, one. Seventh degree of the diatonic scale. Name of the note B in France and Italy.

Si léva il sordíno, *It.* (sē *lā*-vä ēl sŏr-*dē*-nō). Take off the mute.

Si leváno i sordíni, *It.* (sē lĕ-*vä*-nō ē sŏr-*dē*-nō). Take off the mutes.

Si piáce, *It.* (sē pē-*ä*-chĕ). At pleasure.

Si réplica, *It.* (sē *rā*-plē-kä). Repeat.

Si ségue, *It.* (sē *sā*-guĕ). Proceed.

Si táce, *It.* (sē *tä*-chĕ). Be silent.

Si vólta, *It.* (sē *vōl*-tä). Turn over.

Sibilate, *It.* (*sē*-bē-*lä*-tĕ.) To sing with a hissing sound.

Siegesgesang, *Ger.* (*sē*-ghĕs-ghĕ-*sängh*). **Siegeslied,** *Ger.* (*sē*-ghĕs-*lēd*). A triumphal song.

Siegesmarsch, *Ger.* (*sē*-ghĕs-märsh). A triumphal march.

Siciliána, *It.* (sē-chē-lē-*ä*-nä). **Siciliáno,** *It.* (sē-chē-lē-*ä*-nō). **Sicilienne,** *Fr.* (sē-sē-lē-*ĕn*). A dance of the Sicilian peasants. A pastorale in somewhat slow tempo and $\frac{6}{8}$ or $\frac{12}{8}$ time.

Signalist. A military trumpet player.

Signature. The signs placed at the head of the staff at the beginning of a composition, indicating the key and measure of the music which follows.

Signaturen, *Ger.* (sĭg-nä-*too*-rĕn). Figures and signs used in thorough-bass notation.

Sign, canceling. A natural.

Signe, *Fr.* (sēn). Sign.

Silbendehnung, *Ger.* (*sĭl*-bĕn-*dā*-noongk). Singing a syllable to more than one tone. Slurring a syllable.

Silbar, *Sp.* (*sēl*-bär). To whistle.

Silbern, *Ger.* (*sĭl*-bĕrn). Of a silvery tone.

Silboso, *Sp.* (*sēl*-bō-zō). Whistling, hissing.

Silence, *Fr.* (sē-läⁿs). A rest.

Silences pointés, *Fr.* (sē-läⁿs pwänʰ-tā). Dotted rests.

Silenciosaménte, *Sp.* (sē-lĕn-thē-ō-zä-*mān*-tĕ). Quietly, softly.

Silentándo, *It.* (sē-lĕn-*tän*-dō). A term denoting a slackening of the time.

Silénzio, *It.* (sē-*lān*-tsē-ō). A rest.

Simicon, *Ger.* (*sĭm*-ĭ-kŏn). A harp with thirty-five strings.

Simile, *It.* (sē-mē-lĕ). In like manner. Continue in the same manner as the preceding passage.

Simplement, *Fr.* (*sänʰ*-ple-mänʰ). Simply, unaffected.

Sin, *It.* (sēn). Abbreviation of Sino.

Sinfónia, *It.* (sēn-*fō*-nē-ä). A symphony. A name given to the overture of an Italian opera belonging to the earlier school.

Sinfonie, *Ger.* (*sĭn*-fō-*nē*). Symphony.

Singakademie, *Ger.* (*sĭng*-äk-ä-dä-*mē*). A choral singing society. A singing academy.

Sing-art, *Ger.* (*sĭng*-ärt). Style of singing.

Singbar, *Ger.* (*sĭng*-bär). Singable.

Sing-bass, *Ger.* (*sĭng*-bäss). A vocal bass.

Sing-chor, *Ger.* (*sĭng*-kōr). Choir.

Singend, *Ger.* (*sĭng*-ĕnd). Cantabile.

Singe-tanz, *Ger.* (*sĭng*-tänts). Dances accompanied by singing.

Sing-fuge, *Ger.* (*sĭng-foo*-ghĕ). A vocal fugue.

Sing-gedicht, *Ger.* (*sĭng*-ghĕ-*dĭkht*). A poem set to music.

Singhiozzándo, *It.* (sēn-ghē-ōt-*tsänd*-dō). Sobbing, catching the breath.

Sing-kunst, *Ger.* (*sĭng*-koonst). The art of singing.

Sing-mährchen, *Ger.* (*sĭng-mār*-kh'n). A legend in song.

Singmanieren, *Ger.* (*sĭng*-mä-*nē*-r'n). Vocal embellishments.

Sing-meister, *Ger.* (*sĭng-mīs*-tĕr). Singing master.

Sing-schauspiel, *Ger.* (*sĭng*-show-shpēl). A drama interspersed with singing.

Sing-schule, *Ger.* (*sĭng-shoo*-lĕ). Singing school.

Sing-spiel, *Ger.* (*sĭng*-shpēl). "A sing-play." A title given to the earlier form of the German national opera. The name is used at the present time for any light opera or operetta with spoken interludes.

Sing-stimme, *Ger.* (*sĭng-shtĭm*-me). A vocal part. The singing voice, the voice.

Sing-stuck, *Ger.* (*sĭng*-shtük). Air, melody.

Sing-stunde, *Ger.* (*sĭng-shtoon*-dĕ). Singing lesson.

Sing-verein, *Ger.* (*sĭng*-fĕ-*rīn*). Choral society.

Sing-weise, *Ger.* (*sĭng-vī*-sĕ). In a singing style.

Sinístra, *It.* (sē-*nēs*-trä). Left.

Sink-a-pace. See Cinque-pace.

Síno, *It.* (*sē*-nō). As far as, to, up to, till.

Síno al fine, *It.* (*sē*-nō äl *fē*-nĕ). To the end.

Si piáce, *It.* (sē pē-*ä*-chĕ). Ad libitum.

Sirenion, (sī-*rĕn*-ĭ-ŏn). An instrument of the piano and harpsichord class.

Si réplica, *It.* (sē *rā*-plē-kä). To be repeated.

Si scríva, *It.* (sē *skrē*-vä). As written.

Si segue, *It.* (sē sā-guĕ). As follows.

Sistéma, *It.* (sēs-*tĕ*-mä). Staff.

Sister, *Ger.* (sĭs-tĕr). An old German guitar.

Sistro, *It.* (sēs-trō). A triangle.

Sistrum, *Lat.* (*sĭs*-trŭm). A rattle used by the ancient Egyptians, the Greeks, and Romans. Its common form was that of a handle surmounted by a loop of metal having cross-bars on which rings were sometimes placed.

Si táce, *It.* (sē *tä*-chĕ). Be silent.

Sitz, *Ger.* (sĭtz). Place, situation.

Si vólga, *It.* (sē *vōl*-gä). } Turn over.
Si vólta, *It.* (sē *vōl*-tä). }

Sixième, *Fr.* (sēz-ĭ-*ām*). } Sixth.
Sixte, *Fr.* (sēkst). }

Sixte ajoutée, *Fr.* (sēkst ä-*zhoo*-tā). Added sixth.

Skalde, *Ger.* (*skäl*-dĕ). A scald; ancient Scandinavian bard.

Skizze, *Ger.* (*skĭts*-tsĕ). Sketch.

Skizzen, *Ger.* (*skĭts*-tsĕn). Sketches.

Sláncio, *It.* (*slän*-shō). } Impetuosity. Sometimes written
Slanzio, *It.* (*slän*-tsē-ō). } "islancio."

Slargándo, *It.* (slär-*gän*-dō). } Growing slow.
Slargandósi, *It.* (slär-gän-*dō*-zē). }

Slentándo, *It.* (slĕn-*tän*-dō). Slargando.

Slissáto, *It.* (slēs-*zä*-tō). Slurred.

Slur. The sign ⁀ which, when placed over or under two or more notes, indicates that the passage is to be performed legato.

Smaniánte, *It.* (smä-nē-*än*-tĕ). } In an impetuous, passion-
Smaniáto, *It.* (smä-nē-*ä*-tō). } ate style.
Smanióso, *It.* (smä-nē-*ō*-zō). }

Sminuéndo, *It.* (smē-noo-*ĕn*-dō). } Diminishing and increas-
Sminuíto, *It.* (smē-noo-*ē*-tō). } ing in speed and force.

Smoréndo, *It.* (smō-*rān*-dō). Dying away.

Smorfióso, *It.* (smōr-fē-*ō*-zō). Affected expression.

Smorzándo, *It.* (smŏr-*tsän*-dō). Dying away.

Soâve, *It.* (sō-*ä*-vĕ). Soft, sweet, suave.

Soaveménte, *It.* (sō-ä-vĕ-*mān*-tĕ). Suavely.

Soggétto, *It.* (sōd-*jät*-tō). Subject, theme.

Sognándo, *It.* (sōn-*yän*-dō). In a dreamy style.

Soh. Term given to the syllable sol in the Tonic sol-fa system.

Soirée musicale, *Fr.* (*swä*-rā mü-zē-*käl*). A musical evening.

Sol. Name of the note G in France, also the fifth note of the diatonic scale.

Sóla, *It.* (*sō*-lä). Alone.

Solemnis, *Lat.* (sō-*lĕm*-nĭs). Solemn.

Solénne, *It.* (sō-*län*-nĕ). } Solemn, splendid, pompous.
Solennelle, *Fr.* (sō-*lĕn*-nĕl). }

Solenneménte, *It.* (sō-*lĕn*-nĕ-*mān*-tĕ). Solemnly.

Solennità, *It.* (sō-*lĕn*-nē-*tä*). Solemnity.

Solfà, *It.* (*sōl*-fä). Scale. A conductor's baton.

Sol-fa. To sing solfeggi. Solmisation and its syllables, do, re, mi, etc.

Solfeggiare, *It.* (sōl-fäd-jē-*ä*-rĕ). To sol-fa.

Solfège, *Fr.* (sōl-*fäzh*). } A vocal exercise on one
Solféggi, *It.* (sōl-*fäd*-jē). } vowel, the syllables of sol-
Solféggio, *It.* (sōl-*fäd*-jē-ō). } misation, or words.

Soli, *It.* (*sō*-lē). The parts for solo performers.

Solito, *It.* (*sō*-lē-tō). Usual, accustomed.

Solmisation. Sol-fa-ing. A system of teaching scales and intervals by the syllables, do, re, mi, etc.

Solo, *It.* (*sō*-lō). Alone. Music for a single instrument or voice with or without accompaniment.

Solosänger, *Ger.* (*sō*-lō-*säng*-ĕr). A solo singer.

Solospieler, *Ger.* (*sō*-lō-*shpē*-lĕr). A solo player.

Solostimme, *Ger.* (*sō*-lō-*shtĭm*-mĕ). A solo part or voice.

Sombrer, *Fr.* (*sŏm*-brā). A term used in vocal music to indicate a sombre, veiled, but intense expression.

Somma, *It.* (sōm-mä). Highest, greatest, supreme, utmost, extreme.

Sommerlied, *Ger.* (sōm-mĕr-lēd). A song in praise of summer.

Son, *Fr.* (sŏn*h*). Tone, sound.

Son harmonique, *Fr.* (sŏn*h* här-*mō*-nēk). Harmonic tone.

Son plein, *Fr.* (sŏn*h* plān*h*). A round, full tone.

Sonábile, *It.* (sō-*nä*-bē-lĕ). Sounding, resonant.

Sonánte, *It.* (sō-*nän*-tĕ). Sonorous, resonant, resounding.

Sonáre, *It.* (sō-*nä*-rĕ). To sound, to play.

Sonáre álla ménte, *It.* (sō-*nä*-rĕ *äl*-lä *mān*-tĕ). To improvise.

Sonata. An extended instrumental composition, usually of three or four movements.

Sonáta da cámera, *It.* (sō-*nä*-tä dä *kä*-mĕ-rä). A sonata designed for the chamber or parlor.

Sonata da chiésa, *It.* (sō-*nä*-tä dä kē-*ā*-zä). A church sonata, an organ sonata.

Sonate, *Fr.* (sō-*nät*) and *Ger.* (sō-*nä*-tĕ). A sonata.

Sonatóre, *It.* (sō-nä-*tō*-rĕ). A performer on any instrument.

Sonévole, *It.* (sō-*nā*-vō-lĕ). See Sonabile.

Sóno, *It.* (*sō*-nō). Tone, sound.

Sonoraménte, *It.* (sō-nō-rä-*mān*-tĕ). Sonorously, resoundingly.

Sonóre, *It.* (sō-*nō*-rĕ). Sonorous.

Sonus, *Lat.* (*sō*-nŭs). Tone, sound.

Sópra, *It.* (*sō*-prä). Above, over, higher; upon, on.

Sópra dominánte, *It.* (*sō*-prä dō-mē-*nän*-tĕ). Dominant.

Sopra tónica, *It.* (*sō*-prä *tō*-nē-kä). Super tonic.

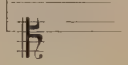
Sópra úna córde, *It.* (*sō*-prä *oo*-nä *kŏr*-dĕ). On one string.

Sopran, *Ger.* (sō-*prän*). Soprano.

Sopran-schlüssel, *Ger.* (sō-*prän*-*shlüs*-s'l). Treble clef.

Sopran-stimme, *Ger.* (sō-*prän*-*shtĭm*-mĕ). Soprano voice or part.

Sopráno, *It.* (sō-*prä*-nō). The highest division of the human voice.

Soprano clef. The C clef on the first line.

Sórda, *It.* (sōr-dä). Dull, muffled. [tone.

Sordaménte, *It.* (sōr-dä-*mān*-tĕ) With a muffled, veiled

Sordíno, *It.* (sōr-*dē*-nō). A mute. Beethoven used the terms *con sordini* and *senza sordini* to denote when and when not to use the soft pedal of the piano.

Sórdo, *It.* (*sōr*-dō). Muted.

Sordun, *Ger.* (*sōr*-doon). A mute for the trumpet.

Sorgfältig, *Ger.* (*sōrg*-fāl-tĭgh). Cautious, careful.

Sortie, *Fr.* (*sŏr*-tē). A closing voluntary for the organ.

Sortíta, *It.* (sŏr-*tē*-tä). See sortie. Also the first number sung by a leading character in an opera.

Sospensivaménte, *It.* (sōs-pĕn-sē-vä-*mān*-tĕ). Irresolutely, doubtfully.

Sospirándo, *It.* (sōs-pē-*rän*-dō). } Sighing, sobbing. A vo-
Sospiránte, *It.* (sōs-pē-*rän*-tĕ). } cal effect.

Sospirévole, *It.* (sōs-pē-*rā*-vō-lĕ). } Sighing deeply. Mournful, plaintive.
Sospiróso, *It.* (sōs-pē-*rō*-zō). }
Sosteneńdo, *It.* (sōs-tĕ-*nān*-dō). } See sostenuto.
Sostenénte, *It.* (sōs-tĕ-*nān*-tĕ). }
Sostenúto, *It.* (sōs-tĕ-*noo*-tō). Sustained. As a tempo mark it is about the same as andante.
Sótto, *It.* (*sōt*-tō). Under, below.
Sótto dominánte, *It.* (*sōt*-tō dō-mē-*nän*-tĕ). The subdominant.
Sóttovóce, *It.* (*sōt*-tō *vō*-chē). In an undertone.
Soubasse, *Fr.* (*soo*-bäs). Sub-bass.
Soupir, *Fr.* (*soo*-pēr). A quarter rest.
Sourdement, *Fr.* (*soord*-mänh). In a subdued manner.
Sourdine, *Fr.* (*soor*-dēn). A mute.
Sous, *Fr.* (soo). Below, under.
Sous-chantre, *Fr.* (soo-*shänhtr*). A deputy precentor or cantor. An assistant choir-master.
Sous-dominante, *Fr.* (soo dō-mĭ-*nänht*). Sub-dominant.
Sous-médiante, *Fr.* (soo-mā-dĭ-*änht*). Sub-mediant.
Sous-tonique, *Fr.* (soo-tō-*nēk*). Subtonic or leading note.
Soutenir, *Fr.* (soo-tē-*nēr*). To sustain a sound.
Spagnolétta, *It.* (spän-yō-*lāt*-tä). A Spanish dance.
Spagnuola, *It.* (spän-yoo-*ō*-lä). The guitar.
Sparta, *It.* (*spär*-tä). } A partitura.
Spartita, *It.* (spär-*tē*-tä). }
Spartíto, *It.* (spär-*tē*-tō). }
Sparte, *Ger.* (spär-tĕ). }
Spasshaft, *Ger.* (*shpäss*-häft). Scherzando.
Spezzáto, *It.* (spĕt-*tsä*-tō). Divided.
Spianáta, *It.* (spē-ä-*nä*-tä). } Smooth, even, tranquil.
Spianáto, *It.* (spē-ä-*nä*-tō). }
Spiccataménte, *It.* (spēk-kä-tä-*mān*-tĕ). Brilliantly.
Spiccáto, *It.* (spēk-*kä*-tō). A variety of springing-bow in violin-playing.
Spiel, *Ger.* (shpēl). Play, performance.
Spielart, *Ger.* (shpēl-ärt). Style or system of playing.
Spiel manieren, *Ger.* (shpēl mä-*nē*-r'n). Instrumental embellishments.
Spírito, *It.* (*spē*-rē-tō). Spirit, life.
Spiritosaménte, *It.* (spē-rē-tō-zä-*mān*-tĕ). } With energy and animation.
Spiritóso, *It.* (spē-rē-*tō*-zō). }
Spirituóso, *It.* (spē-rē-too-*ō*-zō). }
Spitze, *Ger.* (*shpĭt*-tsĕ). Point. Point of a bow. Also denoting the toe in organ-playing.
Spottlied, *Ger.* (shpōt-lēd). A satirical song.
Springing-bow. A kind of bowing used by violin-players in which the bow is allowed to drop on the string, its elasticity causing it to rebound after every tone.
Spruchgesang, *Ger.* (*shprookh*-ghĕ-*sängh*). An anthem.
Sprung, *Ger.* (shproongh). A leap or skip.
Sprung-weise, *Ger.* (shproongk-vī-sĕ). By leaps or skips.
Squilla, *It.* (*squēl*-lä). A little bell; a shrill-sounding bell.
Squillánte, *It.* (squēl-*län*-tĕ). Ringing, sounding, bell-like in tone.
Sta, *It.* (stä). As it stands.
Stabat Mater, *Lat.* (*stä*-bät *mä*-tĕr). A hymn on the crucifixion.
Stábile, *It.* (*stä*-bē-lĕ). Firm, steady.
Staccáre, *It.* (stäk-*kä*-rĕ). To make staccato.
Staccatíssimo, *It.* (stäk-kä-*tēs*-sē-mō). Very much detached.
Staccáto, *It.* (stäk-*kä*-tō). Detached, separated.
Staff. The five parallel horizontal lines and their four intervening spaces used in musical notation.
Staff-degree. A degree on the staff.
Stambuzáre, *It.* (stäm-boo-*tsä*-rĕ). To beat the drum.
Stamm, *Ger.* (shtäm). Root.
Stamm-akkord, *Ger.* (shtäm-äk-kōrd). A chord in its fundamental position.
Stampíta, *It.* (stäm-*pē*-tä). A song with instrumental accompaniment.
Ständchen, *Ger.* (*shtänd*-khĕn). A serenade.
Standhaft, *Ger.* (*shtänd*-häft). Steady, resolute.
Stanghétta, *It.* (stän-*gāt*-tä). Bar.
Stark, *Ger.* (shtärk). Loud, vigorous.
Stärker, *Ger.* (shtär-kĕr). Louder.
Stave. See Staff.
Steg, *Ger.* (shtĕgh). Bridge.
Stentándo, *It.* (stĕn-*tän*-dō). Delaying, dragging, or retarding the tempo.
Stentáto, *It.* (stĕn-*tä*-tō). Delayed, retarded.
Step. At times used instead of degree and tone.
Sterbe-gesang, *Ger.* (*shtĕr*-bĕ ghĕ-*sängk*). } Funeral hymn.
Sterbe-lied, *Ger.* (*shtĕr*-bĕ *lēd*'). }
Sterbend, *Ger.* (*shtĕr*-bĕnd). Morendo.
Sterbe-ton, *Ger.* (*shtĕr*-bĕ-*tōn*). A tone diminishing insensibly.
Stéso, *It.* (*stā*-zō). Extended, prolonged.
Stéso móto, *It.* (*stā*-zō *mō*-tō). A slow movement.
Stésso, *It.* (*stās*-sō). Same as steso.
Stibacchiáto, *It.* (stē-bäk-kē-*ä*-tō). Relaxing, retarding the time.
Stich, *Ger.* (shtĭkh). A dot or point.
Stil, *Ger.* (shtīl). } Style.
Stile, *It.* (*stē*-lĕ). }
Stilo, *It.* (*stē*-lō). }
Still, *Ger.* (shtĭl). Calm, tranquil.
Stimme, *Ger.* (*shtĭm*-mĕ). Voice, part.
Stimm ansatz, *Ger.* (shtĭm *än*-säts). Attack of a vocal tone.
Stimm bänder, *Ger.* (shtĭm *bān*-dĕr). Vocal chords.
Stimm bildung, *Ger.* (shtĭm bĭl-doongk). Training of the voice.
Stimm buch, *Ger.* (shtĭm bookh). A part book.
Stimm führer, *Ger.* (shtĭm führĕr). Leader in a chorus.
Stimm führung, *Ger.* (shtĭm *füh*-roongk). Leading of the parts.
Stimm mittel, *Ger.* (shtĭm mĭtt'l). Vocal powers.
Stimm umfang, *Ger.* (shtĭm *oom*-fängk). Compass of the voice.
Stimmungsbild, *Ger.* (*shtĭm*-moongs-bĭld). A short characteristic piece.
Stinguéndo, *It.* (stēn-*guān*-dō). Dying away.
Stiracchiáto, *It.* (stē-räk-kē-*ä*-tō). } Dragging, retarding.
Stiráto, *It.* (stē-*rä*-tō). }
Stonánte, *It.* (stō-*nän*-tĕ). Discordant, out of tune.
Stop. To change the pitch of an instrument.
Stopfen, *Ger.* (shtōp-fĕn). To stop.
Stopf töne, *Ger.* (shtōpf *tö*-nĕ). Stopped tones.
Stórta, *It.* (stōr-tä). A serpent.
Stosszeichen, *Ger.* (*shtōs*-tsī-k'n). Staccato mark.
Straccicalándo, *It.* (strät-chē-kä-län-dō). Prattling, babbling.
Strain. Melody, tune.
Strascicándo, *It.* (strä-shē-*kän*-dō). Dragging.

Strathspey. A lively Scottish dance.

Stravagánte, *It.* (strä-vä-*gän*-tĕ). Fantastical, extravagant.

Streichen, *Ger.* (*shtrī*-kh'n). To bow, as in violin-playing. To cut, as any portion of an opera.

Streich instrumente, *Ger.* (shtrīkh ĭn-stroo-*mĕn*-tĕ). Stringed instruments played with a bow.

Streich orchester, *Ger.* (shtrīkh or-*kĕs*-tĕr). String-orchestra.

Streich quartett, *Ger.* (shtrīkh kwär-tĕt). String-quartet.

Streich trio, *Ger.* (strikh trē-ō). String-trio.

Streng, *Ger.* (shtrĕng). Severe, strict.

Strépito, *It.* (*strā*-pē-tō). Noise.

Strepitosaménte, *It.* (strā-pē-tō-zä-*mān*-tĕ). **Strepitóso,** *It.* (strā-pē-*tō*-zō). In a boisterous, impetuous style.

Strétta, *It.* (*strāt*-tä). **Strétte,** *Fr.* (strĕt). **Strétto,** *It.* (*strāt*-tō). A division of a figure. A closing passage taken in faster tempo.

Stridénte, *It.* (strē-*dān*-tĕ). Harsh, noisy. In pianoforte playing it is the same as martellato.

Stridevole, *It.* (strē-dĕ-*vō*-lĕ). Sharp, shrill, acute.

Stringéndo, *It.* (strēn-*gān*-dō). Accelerando.

Strisciándo, *It.* (strē-shē-*än*-dō). Smooth, legato, gliding; glissando.

Strombazzáta, *It.* (strōm-bät-*tsä*-tä). **Strombettáta,** *It.* (strōm-bĕt-*tä*-tä). The sound of a trumpet.

Stromentáto, *It.* (strō-mĕn-*tä*-tō). Instrumented.

Stroménto, *It.* (strō-*mān*-tō). Instrument.

Stuck, *Ger.* (shtük). A piece.

Stufe, *Ger.* (*shtoo*-fĕ). Step, degree.

Stürmisch, *Ger.* (*shtürm*-ĭsh). Passionate, impetuous.

Su, *It.* (soo). On, upon; near, by.

Suáve, *It.* (*swä*-vĕ). See Soave.

Sub, *Lat.* (sŭb). Under.

Subdominant. The under-dominant. The fourth degree of the diatonic scale.

Subitaménte, *It.* (soo-bē-tä-*mān*-tĕ). **Súbito,** *It.* (*soo*-bē-tō). Quickly, suddenly.

Submediant. The sixth degree of the diatonic scale.

Subsemitone. The sub-tonic, or leading tone.

Subtonic. The leading note.

Suffocáto, *It.* (soof-fō-*kä*-tō). Muffled, damped.

Suivez, *Fr.* (swē-vā). Same as Colla parte. Follow, continue, go on; simile.

Sujet, *Fr.* (sü-zhā). Subject.

Sul, *It.* (sool). On the.

Sul ponticéllo, *It.* (sool pŏn-tē-*chĕl*-lō). Near the bridge.

Súlla, *It.* (*sool*-lä). Sul.

Súlla córda, *It.* (*sool*-lä *kŏr*-dä). On the string.

Súlla tastiéra, *It.* (*sool*-lä täs-tē-*ā*-rä). By or near the finger-board.

Súlle, *It.* (*sool*-lĕ). Sul.

Suo loco, *It.* (soo-ō *lō*-kō). Its accustomed place.

Suonantina, *It.* (swō-nän-*tē*-nä). A short, easy sonata.

Suonàre, *It.* (swō-*nä*-rĕ). Same as sonare.

Super, *Lat.* (*sū*-pĕr). Over, above.

Superdominant. The sixth degree of the diatonic scale.

Superfluous. Sometimes used instead of augmented.

Supertonic. The second degree of the diatonic scale.

Super-tonique, *Fr.* (sü-pĕr-*tō*-nēk). Supertonic.

Supplichévole, *It.* (soop-plē-*kā*-vō-lĕ). **Supplichevolménte,** *It.* (soop-plē-kä-*vōl*-*mān*-tĕ). In a pleading manner.

Sur, *Fr.* (sür). On, over, upon.

Sur une corde, *Fr.* (sür üne kŏrd). See Sopra una corda.

Sus-dominante, *Fr.* (sü-dō-mĭ-*nänht*). Superdominant.

Suss, *Ger.* (süss). Sweetly.

Sus-tonique, *Fr.* (sü-tō-*nēk*). Supertonic.

Susurrando, *It.* (soo-soor-*rän*-dō). **Susurrante,** *It.* (soo-soor-*rän*-tĕ). In a murmurous, whispering tone.

Svegliáto, *It.* (svāl-yē-*ä*-tō). Brisk, lively, animated.

Svélto, *It.* (*svāl*-tō). Light, agile.

Swell. A crescendo , or crescendo and diminuendo .

Syllabic melody. One syllable to each tone of the melody.

Syllable-name. The syllables do, re, mi, etc.

Symphonic. Relating to a symphony. Any composition constructed similar to a symphony.

Symphony. A sonata for orchestra.

Syncopate. To change or omit the accent of a tone or chord occurring on a strong beat by tieing it over from the former weak beat; to interrupt the rhythm; to give a strong accent on a weak beat.

Syncopated. A tone or chord deprived of its natural accent. See Syncopate.

Syncopation. The tieing of a weak beat to the succeeding strong beat, and thus changing the natural accent; the temporary establishment of a false rhythm; an interruption of the natural rhythm.

Synkope, *Ger.* (sĭn-*kō*-pē). Syncopation.

System. The several staves belonging to a score.

Système, *Fr.* (sĭs-*tĕm*). Compass of an instrument. The complete range of musical tones.

Táce, *It.* (*tä*-chĕ). **Tácet,** *Lat.* (*tä*-sĕt). **Táci,** *It.* (*tä*-chē). "Is silent." A vocal or instrumental part so marked is silent through a portion or all of the number or movement in which the term is used.

Taille, *Fr.* (*tā*-ŭh). Tenor voice. In a vocal sense the term is used only in church music. The tenor violin (Viola).

Takt, *Ger.* (täkt). Time, a measure, a beat.

Takt accent, *Ger.* (täkt äk-tsĕnt). Measure accent, primary accent.

Taktart, *Ger.* (*täkt*-ärt). Measure, time, rhythm.

Takterstickung, *Ger.* (*täk*-tĕr-*shtĭk*-oongk). Syncopation; the omission of measures by the overlapping of two periods or phrases.

Taktfach, *Ger.* (*täkt*-fäkh). A space.

Taktfest, *Ger.* (*täkt*-fĕst). Steady in time.

Taktglied, *Ger.* (*täkt*-glēd). Measure note.

Takthalten, *Ger.* (*täkt*-häl-tĕn). To keep time. Keeping time.

Taktieren, *Ger.* (*täk*-tē-r'n). To beat time.

Taktierstab, *Ger.* (*täk*-tēr-shtäb). A baton.

Taktmässig, *Ger.* (*täkt-mā*-sĭg). In time.

Taktmesser, *Ger.* (*täkt-mĕs*-sĕr). Metronome.

Takt-note, *Ger.* (*täkt-nō*-tĕ). A whole note.

Takt-pause, *Ger.* (*täkt-pow*-zĕ). Measure-rest.

Takt-schlagen, *Ger.* (*täkt shlä*-ghĕn). To beat time.

Takt-stock, *Ger.* (*täkt*-shtŏk). A baton.

Takt-strich, *Ger.* (*täkt*-shtrĭkh). A bar.

Takt-teil, *Ger.* (*täkt*-tīl). A beat or count.

Taktvorzeichnung, *Ger.* (täkt-fōr-*tsīk*-noongk) } Time sig-
Taktzeichen, *Ger.* (täkt-*tsī*-kh'n). } nature.

Tändelnd, *Ger.* (*tän*-dĕlnd). In a bantering, toying style.

Tantíno, *It.* (tän-*tē*-nō). A little.

Tánto, *It.* (*tän*-tō). As much, so much. Too. *Allegro non tanto,* not too fast.

Tanz, *Ger.* (tänts). Dance.

Tanze, *Ger.* (*tän*-tsĕ). Dances.

Tarantélla, *It.* (tär-rän-*tāl*-lä). A southern Italian dance in rapid $\frac{6}{8}$ time. A title given to modern instrumental pieces in $\frac{6}{8}$ or $\frac{12}{8}$ time, and of very rapid tempo.

Tardaménte, *It.* (tär-dä-*mān*-tĕ). Lingeringly, slowly.

Tardándo, *It.* (tär-*dän*-dō). } See Ritardando.
Tardáto, *It.* (tär-*dä*-tō). }

Tárdo, *It.* (*tär*-dō). Lingering, slow.

Tastatur, *Ger.* (*täs*-tä-toor). } Keyboard.
Tastatúra, *It.* (täs-tä-*too*-rä). }

Tásto, *It.* (*täs*-tō). Key (mechanical). Touch.

Tásto sólo, *It.* (*täs*-tō *sō*-lō). A direction to play the part so marked either as written or in octaves without chords.

Tattoo. The beat of a drum at night calling the soldiers to their quarters.

Te. For si in the tonic sol-fa system.

Té, *Fr.* (tā). C♯.

Technic, (*tĕk*-nĭk). } The skill in vocal or instrumental performance apart from the musical taste displayed; the mechanical training of an artist obtained through technical studies.
Technik, *Ger.* (tĕk-nĭk).
Technique, (tĕk-nēk).

Teddéo, *It.* (tĕd-*dā*-ō). Te Deum.

Tedésca, *It.* (tĕ-*dās*-kä). } German.
Tedésco, *It.* (tĕ-*dās*-kō). }

Téma, *It.* (*tā*-mä). Theme.

Tempestosaménte, *It* (tĕm-pĕs-tō-zā-*mān*-tĕ). Impetuously.

Tempestóso, *It.* (tĕm-pĕs-*tō*-zō). Impassioned.

Témpo, *It.* (*tām*-pō). Time, measure, rate of speed, beat.

Tempo-mark. The word or phrase placed at the beginning of a movement indicating the general character and speed desired.

Tempo wie vorher, *Ger.* (tĕm-po vē *fō*-rĕr). The time as before.

Temps, *Fr.* (tän*h*.) Time, beat.

Temps faible, *Fr.* (tän*h* fā-b'l). Weak beat.

Temps fort, *Fr.* (tän*h* fōr). Strong beat.

Temps frappé, *Fr.* (tän*h* frăp-pā). The down beat.

Temps levé, *Fr.* (tan*h* lĕ-vā). The up beat.

Tendre, *Fr.* (tän*h*dr). Tender.

Tendrement, *Fr.* (tän*h*dr-män*h*). Tenderly.

Tenebrae, *Lat.* (*tĕn*-ĕ-brā). Gloom, darkness.

Teném̀do, *It.* (tĕ-*nān*-dō). Holding.

Ténera, *It.* (*tān*-ĕ-rä). } Delicate, tender, soft.
Teneraménte, *It.* (tĕn-ĕ-rä-*mān*-tĕ).
Tenerézza, *It.* (tĕn-ĕ-*rāt*-tsä).
Ténero, *It.* (*tā*-nĕ-ro).

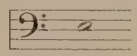
Tenéte, *It.* (tĕ-*nā*-tĕ). Hold.

Teneur, *Fr.* (tĕ-nur). The melody or canto fermo in a choral or hymn-tune.

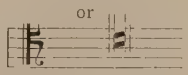
Tenir, *Fr.* (tĕ-*nēr*). To hold.

Tenor. The highest natural male voice.

Tenor C. The lowest C in the tenor voice; small C.



Tenor clef. The C clef placed on the fourth line.



Tenóre, *It.* (tĕ-*nō*-rĕ). Tenor.

Tenóre búffo, *It.* (tĕ-*nō*-rĕ *boof*-fō). A tenor who sings comic roles.

Tenóre leggiéro, *It.* (tĕ-*nō*-rĕ lĕd-jē-*ā*-rō). A light tenor.

Tenóre robústo, *It.* (tĕ-*nō*-rĕ rō-*boos*-tō). A powerful tenor.

Tenor schlüssel, *Ger.* (tĕn-*ōr shlüs*-s'l). Tenor clef.

Tenor-viole, *Ger.* (tĕn-*ōr*-fī-*ō*-lĕ). Tenor violin, viola

Tenor zeichen, *Ger.* (tĕn-*ōr tsī*-k'n). Tenor clef.

Tenue, *Fr.* (tĕ-nü). } Held, sustained.
Tenúte, *It.* (tā-*noo*-tĕ).
Tenúto, *It.* (tā-*noo*-tō).

Tepidaménte, *It.* (tā-pē-dä-*mān*-tĕ). In an even unimpassioned style.

Ter, *Lat.* (tĕr). Thrice. A term denoting that a passage of instrumental music, verse, or part of one in a song is to be rendered three times.

Tercet, *Fr.* (tĕr-sā). A triplet.

Ternary. Composed of three parts.

Ternary measure. Simple triple time.

Tertia, *Lat.* (*tĕr*-shĭ-ä). Third.

Tertia modi, *Lat.* (*tĕr*-shĭ-ä *mō*-dē). Third degree of a scale.

Terz, *Ger.* (tĕrts). } The interval of a third. Third.
Térza, *It.* (*tār* tsä). }

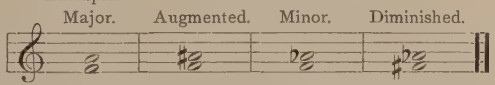
Tetrachord. The interval of a perfect fourth. The scale progression of four tones comprising a perfect fourth.

Tetratone. An augmented fourth.

Thema, *Ger.* (*tā*-mä). } Theme.
Thème, *Fr.* (tĕm). }

Thesis, *Gk.* (thā-sĭs). The down beat, strong beat.

Third. An interval consisting of three degrees.
Example.



Thorough-bass. A kind of musical short-hand in which the chords to be written or played with a given bass are indicated by figures placed over or under the given part.

Threnody. A dirge. A song of lamentation.

Tie. A curved line joining two notes of the same pitch intended to be rendered as one note equal in time value to the two given notes.

Tief, *Ger.* (tēf). Low, grave, deep.

Tierce, *Fr.* (tērs). Third.

Tige, *Fr.* (tēg). Stick of a bow; drumstick.

Timbre, *Fr.* (tăn*h*br). } Quality of tone.
Timbro, *It.* (*tēm*-brō). }

Time. Tempo; duration of notes, number and duration of beats in a measure.

Time signature. The sign placed after the clef and its accompanying sharps or flats, usually in the form of a fraction.

Simple Common Times.

The following are the present time signatures.

Alla Breve — 𝔠. Every measure contains four beats, each represented by a half note or its equivalent.

Common time — 𝔠 or $\frac{4}{4}$. Four beats, each represented by a quarter note or its equivalent.

Alla Cappella — 𝔠 or $\frac{2}{2}$. The same time signature as Alla Breve. Every measure contains two beats, each represented by a half note or its equivalent. Sometimes incorrectly called Alla Breve.

$\frac{2}{4}$ Two quarter beats to each measure.

$\frac{4}{8}$ Four eighth beats to each measure.

$\frac{8}{8}$ Eight eighth beats to each measure.

$\frac{2}{8}$ Two eighth beats to each measure.

$\frac{4}{16}$ Four sixteenth beats to each measure.

Compound Common Times.

$\frac{12}{4}$ Four beats, each represented by a dotted half note or its equivalent.

$\frac{12}{8}$ Four beats, each represented by a dotted quarter note or its equivalent.

$\frac{12}{16}$ Four beats, each represented by a dotted eighth note or its equivalent.

$\frac{6}{2}$ Two beats, each represented by a dotted whole note or its equivalent.

$\frac{6}{4}$ Two beats, each represented by a dotted half note or its equivalent.

$\frac{6}{8}$ Two beats, each represented by a dotted quarter note or its equivalent.

$\frac{6}{16}$ Two beats, each represented by a dotted eighth note or its equivalent.

$\frac{24}{16}$ Eight beats, each represented by a dotted eighth note or its equivalent.

Simple Triple Times.

$\frac{3}{1}$ or 3 Three beats, each represented by a whole note or its equivalent.

$\frac{3}{2}$ Three beats, each represented by a half note or its equivalent.

$\frac{3}{4}$ Three beats, each represented by a quarter note or its equivalent.

$\frac{3}{8}$ Three beats, each represented by an eighth note or its equivalent.

$\frac{3}{16}$ Three beats, each represented by a sixteenth note or its equivalent.

Compound Triple Times.

$\frac{9}{4}$ Three beats, each represented by a dotted half note or its equivalent.

$\frac{9}{8}$ Three beats, each represented by a dotted quarter note or its equivalent.

$\frac{9}{16}$ Three beats, each represented by a dotted eighth note or its equivalent.

Simple Quintuple Times.

$\frac{5}{4}$ Five beats, each represented by a quarter note or its equivalent.

$\frac{5}{8}$ Five beats, each represented by an eighth note or its equivalent.

Compound Quintuple Times.

$\frac{15}{8}$ Three beats; each beat has the value of five eighth notes.

$\frac{15}{16}$ Three beats; each beat has the value of five sixteenth notes.

Septuple.

$\frac{7}{4}$ Seven beats, each represented by a quarter note or its equivalent.

$\frac{7}{8}$ Seven beats, each represented by an eighth note or its equivalent.

With the foregoing table should be included the double time signatures which seem to be much used by the modern Russian composers, $\frac{5}{8}\frac{3}{8}$, $\frac{3}{8}\frac{5}{8}$, $\frac{2}{8}\frac{5}{8}$, etc. The double time signature denotes that the movement is made up of measures in the two kinds of time indicated, without regard to the order in which the changes occur.

Timidaménte, *It.* (tē-mē-dä-*mān*-tĕ). Fearfully.

Timidézza con, *It.* (tē-mē-*dāt*-sä con). In a timorous, hesitating style.

Timoróso, *It.* (tē-mō-*rō*-zō). Fearful, timorous.

Timorosaménte, *It.* (tē-mō-rō-zä-*mān*-tĕ). Timorously.

Tínto, con, *It.* (*tēn*-tō). Expressive.

Tirade, *Fr.* (tē-răd). A rapid run joining two melody notes.

Tiráta, *It.* (tē-*rä*-tä). } Down-bow.
Tiré, *Fr.* (tē-rā). }

Todesgesang, *Ger.* (*tō*-dĕs-ghĕ-*sängk*). } A funeral song.
Todeslied, *Ger.* (*tō*-dĕs-*lēd*). }

Todtenlied, *Ger.* (*tod*-t'n-*lēd*). Funeral song or anthem.

Ton, *Ger.* (tōn). A tone, mode, key, octave-scale, pitch.

Ton abstand, *Ger* (tŏn *äb*-shtänd). Interval.

Tonarten verwandschaft, *Ger.* (*tōn*-är-t'n fĕr-*vänd*-shäft). Key-relationship.

Ton-bildung, *Ger.* (*tōn-bĭl*-doongk). Vocal culture; production of tone.

Ton-dichter, *Ger.* (*tōn-dĭkh*-tĕr). Composer.

Ton-dichtung, *Ger.* (*tōn-dĭkh*-toongk). Composition.

Ton-fall, *Ger.* (*tōn*-fäll). Cadence.

Ton-farbe, *Ger.* (*tōn-fär*-bĕ). Timbre, quality, tone-color.

Ton-folge, *Ger.* (*tōn-fōl*-ghĕ). A series or succession of tones.

Ton-fuhrung, *Ger.* (*tōn-fü*-roongk). Melodic progression.

Ton-fuss, *Ger.* (*tōn*-foos). A measure, a rhythm.

Ton-gebung, *Ger.* (*tōn-ghā*-boongk). Intonation, tone production.

Ton-geschlecht, *Ger.* (*tōn*-ghĕ-*shlĕkht*). Mode.

Ton-hohe, *Ger.* (*tōn-hō*-hĕ). Pitch.

Ton-kunde, *Ger.* (*tōn*-koondĕ). Science of music.

Tonkunst, *Ger.* (*tōn*-koonst). Art of music, music.

Ton-lage, *Ger.* (*tōn-lä*-ghĕ). Register, pitch.

Ton-leiter, *Ger.* (*tōn-lī*-tĕr). A scale.

Ton malerei, *Ger.* (*tōn mä*-lĕ-rī). Program-music, imitative music; tone-painting.

Ton-satz, *Ger.* (*tōn*-sätz). Composition, composing.

Tonschluss, *Ger.* (*tōn*-shloos). Cadence.

Ton-setzer, *Ger.* (*tōn-sĕt*-tsĕr). Composer.

Ton-setzkunst, *Ger.* (*tōn-sĕts*-koonst). The art of composition.

Ton-sprache, *Ger.* (*tōn-shpräk*-ĕ). Tone-speech or language-music.

Ton-stück, *Ger.* (*tōn*-shtük). A piece of music, composition.

Ton-stufe, *Ger.* (*tōn-shtoo*-fĕ). Degree of a scale.

Ton-system, *Ger.* (*tōn-sĭs*-tĕm). Tone system or theory of musical tones.

Ton-unfang, *Ger.* (*tōn-oon*-fängk). Compass.

Ton-unterschied, *Ger.* (*tōn-oon*-tĕr-shēd). Interval.

Ton-verziehung, *Ger.* (*tōn*-fĕr-*tsē*-hoongk). *Tempo rabato.*

Ton, *Fr.* (tŏn*h*). Tone, pitch, mode, key, scale.

Ton bouché, *Fr.* (tŏn*h* boo-shā). A stopped tone, as in horn-playing.

Ton d'église, *Fr.* (tŏn*h* dā-glēz). Church-mode.

Ton entier, *Fr.* (tŏn*h* än*h*-tē-âr). Whole tone.

Ton majeur, *Fr.* (tŏn*h* *mä*-zhŭr). Major key.

Ton mineur, *Fr.* (tŏn*h* *mĭ*-nŭr). Minor key.

Ton ouvert, *Fr.* (tŏn*h* oo-*vâr*). An open or natural tone, as on a horn or trumpet.

Ton relatif, *Fr.* (tŏn*h* rĕl-ä-*tēf*). Related key.

Tonic.
Tonica, *It.* (*tō*-nē-kä).
Tonika, *Ger.* (*tō*-nē-kā).
Tonique, *Fr.* (tō-nēk).
} The keynote of a scale.

Tonic chord. The triad having for its root the keynote.

Tonisch, *Ger.* (*tōn*-ĭsh). Tonic.

Tóno, *It.* (*tō*-nō). Key, tone.

Tonos, *Gk.* (*tō*-nŏs).
Tonus, *Lat.* (*tō*-nŭs). } A tone, a mode.

Tostaménte, *It.* (tōs-tä-*mān*-tĕ). Quick and bold.

Tostíssimo, *It.* (tōs-*tēs*-sē-mō). With great rapidity.

Tósto, *It.* (*tōs*-tō). Rapid.

Toujours, *Fr.* (too-zhoor). Same as sempre.

Tradólce, *It.* (trä-*dōl*-chĕ). Very soft, sweet.

Tradótto, *It.* (trä-*dōt*-tō). Transposed, arranged.

Tragen der Stimme, *Ger.* (*trä*-g'n dĕr *shtĭm*-mĕ). Carry the part or voice; equivalent to Portamento.

Trainé, *Fr.* (trā-nā). Bound, slurred.

Trait, *Fr.* (trā). A phrase, passage; vocal or instrumental run.

Trait de chant, *Fr.* (trā dŭh shän*h*). Melodic phrase.

Trait d'harmonie, *Fr.* (trā *d'är*-mō-nē). A chord passage.

Traité, *Fr.* (trā-*tā*). Treatise.

Trällern, *Ger.* (*trāl*-lĕrn). To trill.

Tranquíllaménte, *It.* (trän-quēl-lä-*mān*-tĕ). Tranquilly.

Tranquille, *Fr.* (trän-kēye). Tranquil.

Tranquillézza, *It.* (trän-quēl-*lāt*-sä).
Tranquillíta, *It.* (trän-quēl-*lē*-tä). } Tranquillity.

Tranquíllo, *It.* (trän-*quēl*-lō). Tranquil.

Transcrit, *Fr.* (*träns*-krē). Transcribed.

Transcription. The adaptation or arrangement of a composition for some voice or instrument for which it was not intended.

Transponiren, *Ger.* (*träns*-pō-*nē*-rĕn). To transpose.

Transpose. To change the pitch of a composition and thereby place it in another key.

Trascinándo, *It.* (trä-shē-*nän*-dō). See Strascinando.

Transportáto, *It.* (träns-pōr-*tä*-tō). Transposed.

Trattenúto, *It.* (trät-tĕ-*noo*-tō). Retarding the tempo.

Trauermarsch, *Ger.* (*trow*-ĕr-märsh). A funeral march.

Traurig, *Ger.* (*trow*-rĭg). Melancholy, sad.

Tre, *It.* (trā). Three.

Tre córde, *It.* (trā *kör*-dĕ). Three-strings. A term used in pianoforte music denoting that the soft pedal is not to be continued.

Treble. Soprano.

Treble-clef. The G clef.

Treibend, *Ger.* (*trī*-bĕnd). Hastening, urging; accelerando, stringendo.

Tremándo, *It.* (trā-*mān*-dō). With a tremolo effect.

Tremblant, *Fr.* (trän*h*-blän*h*). Tremulant.

Tremblement, *Fr.* (trän*h*bl-män*h*). Tremolo, trill.

Tremolándo, *It.* (trā-mō-*län*-dō). With a tremolo effect.

Trémolo, *It.* (*trā*-mō-lō). A tone or tones rendered in such a way as to produce a quivering or fluttering effect.

Tremolóso, *It.* (trā-mō-*lō*-zō). With a tremulous effect.

Tremulieren, *Ger.* (trā-moo-*lē*-rĕn). To execute a tremolo or trill.

Très, *Fr.* (trā). Very.

Triad. A chord of three tones having a root, third, and fifth.

Trias, *Lat.* (*trē*-ăs). Triad.

Trill. An embellishment consisting of a given note rapidly alternating with its major or minor second.

Tríllo, *It.* (*trēl*-lō). Trill.

Trinklied, *Ger.* (*trĭnk*-lēd). Drinking-song.

Trio. A composition for three parts, voices, or instruments.

Triole, *Ger.* (trē-*ō*-lĕ).
Triolet, *Fr.* (trē-ō-lā). } Triplet.

Triomphale, *Fr.* (trē-ŏn*h*-fäl). Triumphal.

Triomphant, *Fr.* (trē-ŏn*h*-fänt). Triumphant.

Trionfale, *It.* (trē-ōn-*fä*-lĕ). Triumphal.

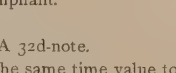
Trionfánte, *It.* (trē-ŏn-*fän*-tĕ). Triumphant.

Tripla, *It.* (*trē* plä). A triplet.

Triple-croche, *Fr.* (trē-p'l-krō-shĕ). A 32d-note.

Triplet. A group of three notes of the same time value to be performed in the time of two of the same kind and in the regular rhythm.

Tristézza, *It.* (trĭs-*tāt*-sä). Melancholy, sadness.

Tritone. An augmented fourth, the interval of three whole tones. 

Trois, *Fr.* (trwä). Three.

Tróppo, *It.* (*trōp*-pō). Too, too much.

Trüb, *Ger.* (trüb).
Trübe, *Ger.* (trüb-ĕ). } Sad, gloomy.

Tucket. A flourish of trumpets.

Tumultuóso, *It.* (too-mool-too-*ō*-zō). Agitated, impetuous.

Tune. Melody, air.

Tuóno, *It.* (*twō*-nō). A tone; a mode.

Túrca, *It.* (*toor*-kä).
Túrco, *It.* (*toor*-kō). } Turkish.

Turn. The sign ∾.

Written. Played.

Tusch, *Ger.* (toosh). A flourish given by the wind-instruments of an orchestra to denote welcome or applause.

A flourish of trumpets accompanied by a roll of drums, the flourish performed three times.

Tútta, *It.* (*toot*-tä).
Tútti, *It.* (*toot*-tē).
Tútto, *It.* (*toot*-tō). } Whole, all.

Tútto árco, *It.* (*toot*-tō *är*-kō). Whole bow.

Über, *Ger.* (*ü*-bĕr). Over, above.

Übergang, *Ger.* (*ü*-bĕr-*gängk*). Modulation, transition.

Überleítung, *Ger.* (*ü*-bĕr-*lī*-toongk). Transitional passage.

Übermässig, *Ger.* (*ü*-bĕr-*mäs*-sĭg). Augmented (intervals).

Übung, *Ger.* (*ü*-boongk). Practice; exercise.

Übungen, *Ger.* (*ü*-boon-ghĕn). Exercises.

Uguále, *It.* (oo-*gwä*-lĕ). Equal, even, like.
Ugualità, *It.* (oo-gwä-lē-*tä*). Equality.
Ugualménte, *It.* (oo-gwäl-*mān*-tĕ). Evenly, alike.
Umfang, *Ger.* (*oom*-fängk). Compass.
Umkehrung, *Ger.* (*oom*-kā-roongk). Inversion.
Umore, *It.* (*oo*-mō-rē). Humor.
Un, *Fr.* (ănh). } A, or an.
Une, *Fr.* (ün). }
Un peu plus lent, *Fr.* (ānh püh plü länh). A little slower.
Un, *It.* (oon.) }
Una, *It.* (*oo*-nä). } A, or an.
Uno, *It.* (*oo*-nō). }
Una corda, *It.* (*oo*-nä *kōr*-dä). A term used in pianoforte music indicating that the soft pedal is to be used.
Una vólta, *It.* (*oo*-nä *vōl*-tä). Once.
Und, *Ger.* (oondt). And.
Undecuplet. A group of eleven notes of the same time-value to be rendered in the time of six or eight of the same kind in the regular rhythm.
Under-song. Burden, refrain.
Undulazione, *It.* (oon-doo-lä-tsē-*ō*-nĕ). The vibrato effect on bow-instruments.
Unendlich, *Ger.* (oon-*ĕnd*-lĭkh). Infinite.
Ungarisch, *Ger.* (*oon*-gä-rĭsh). Hungarian.
Ungeduldig, *Ger.* (oon-ghĕ-*dool*-dĭg). Impatient.
Ungerade Takt, *Ger.* (oon-ghĕ-*rä*-dĕ täkt). Triple time.
Ungestum, *Ger.* (*oon*-ghĕ-shtoom). Impetuous, stormy.
Ungleich, *Ger.* (*oon*-glīkh). Unequal.
Unharmonisch, *Ger.* (oon-här-*mō*-nĭsh). Inharmonic.
Unison. Two or more tones of the same pitch. The term is sometimes used in place of the word prime.
Unison passage. A term given to certain passages in vocal or instrumental compositions where several voices or instruments render the same part in unison or an octave and sometimes two or three octaves apart.
Unitaménte, *It.* (oo-nē-tä-*mān*-tĕ). Unitedly, jointly.
Unita, *It.* (*oo*-nē-tä). } Joined, united.
Unito, *It.* (*oo*-nē-tō). }
Univóco, *It.* (oo-nē-*vō*-kō). One sound or voice.
Uno, *It.* (*oo*-nō). One. See Un.
Uno a uno, *It.* (*oo*-nō ä *oo*-nō). One by one.
Un peu, *Fr.* (ănh püh). A little.
Unruhig, *Ger.* (oon-*roo*-hĭg). Restless.
Unter-dominant, *Ger.* (*oon*-tĕr-*dōm*-ĭ-*nänt*). Subdominant.
Unter halbton, *Ger.* (*oon*-tĕr *hälb*-tōn). The leading note.
Unter-leitton, *Ger.* (*oon*-tĕr-*līt*-tōn). Dominant seventh.
Unter-mediante, *Ger.* (*oon*-tĕr-*mā*-dē-*än*-tĕ). Submediant.
Unter-stimme, *Ger.* (*oon*-tĕr-*shtĭm*-mĕ). Under part.
Ut, *Fr.* (oot). The note C.
Ut, *Lat.* (ŭt). Like, as, just as.
Ut supra, *Lat.* (ŭt *sū*-prä). As above.

Va, *It.* (vä). Continue.
Va crescéndo, *It.* (vä krĕ-*shān*-dō). Continue the crescendo.
Vacillándo, *It.* (vät-chē-*län*-dō). A term denoting that the passage so marked is to be rendered in a vacillating, hesitating style.
Vágo, *It.* (*vä*-gō). Dreamy, vague.
Valeur, *Fr.* (vä-lŭr). }
Valor, *Lat.* (*văl*-ŏr). } Value (time-value).
Valóre, *It.* (vä-*lō*-rĕ). }
Variante, *It.* (vä-rē-*än*-tĕ) and *Fr.* (vä-rē-änt). A variant. See Ossia.
Variáto, *It.* (vä-rē-*ä*-tō). } Varied.
Varié, *Fr.* (vä-rē-*ā*). }
Veeménte, *It.* (vā-*mān*-tĕ). Passionate, vehement.
Velóce, *It.* (vĕ-*lō*-chĕ). Swift, rapid.
Velocemente, *It.* (vĕ-*lō*-chĕ-*mān*-tĕ). Swiftly.
Velocíssimo, *It.* (vĕ-lō-*chēs*-sē-mō). Very swift.
Velocítà, *It.* (vĕ-lō-chē-*tä*). } Swiftness.
Vélocité, *Fr.* (vā-lō-sē-*tā*). }
Venústo, *It.* (vĕ-*noos*-tō). Elegant, graceful.
Veränderungen, *Ger.* (fĕ-*rān*-dĕ-roong-ĕn). Variations.
Verbindung, *Ger.* (fĕr-*bĭn*-doongk). Tying, binding; combination.
Verdeckt, *Ger.* (fĕr-*dĕkt*). Covered, concealed.
Verddoppelt, *Ger.* (fĕr-*dŏp*-p'lt). Doubled.
Verdoppelung, *Ger.* (fĕr-*dŏp*-pĕl-loongk). Doubling.
Vergellen, *Ger.* (fĕr-*ghĕl*-l'n). To diminish gradually.
Vergnügt, *Ger.* (fĕr-gnügt). Cheerful.
Verhallen, *Ger.* (fĕr-*häl*-l'n). To die away.
Verhallend, *Ger.* (fĕr-*häl*-lĕnd). } Dying away.
Verlöschend, *Ger.* (fĕr-*lö*-shĕnd). }
Vermindert, *Ger.* (fĕr-*mĭn*-dĕrt). Diminished.
Verschwindend, *Ger.* (fĕr-*shvin*-dĕnd). Vanishing, dying away.
Versetzen, *Ger.* (fĕr-*sĕt* tsĕn). To transpose.
Versetzung, *Ger.* (fĕr-*sĕt*-tsoongk). Transposition.
Verte, *Lat.* (*vĕr*-tĕ). Turn over. See Volti.
Verve, *Fr.* (vârv). Energy, spirit.
Verwandt, *Ger.* (fĕr-*vändt*). Related.
Verwandte tonarten, *Ger.* (fĕr-*vändt tōn*-är-tĕn). Related keys.
Verweilend, *Ger.* (fĕr-*vī*-lĕnd). Delaying, ritenuto.
Verziert, *Ger.* (fĕr-*tsērt*). Ornamented.
Verzierung, *Ger.* (fĕr-*tsē*-roongk). Ornament, grace, embellishment.
Verzögerung, *Ger.* (fĕr-*tsō*-ghĕ-roongk). Retardation.
Vezzóso, *It.* (vät-*tsō*-zō). Elegant, graceful.
Vezzosamente, *It.* (vät-tsō-zä-*mān*-tĕ). Gracefully.
Vibránte, *It.* (vē-*brän*-tĕ). } With a vibrating quality of
Vibrate, *Lat.* (vē-*brä*-tĕ). } tone.
Vibráto, *It.* (vē-*brä*-tō). A wavering effect produced by the voice; also on bow-instruments.
Vide, *Fr.* (vēd). Open.
Viel, *Ger.* (fēl). Much, great.
Vier, *Ger.* (fēr). Four.
Vierhändig, *Ger.* (*fēr-hän*-dĭg). Four hands.
Vierklang, *Ger.* (*fēr*-klängk). Chord of the seventh.
Vif, *Fr.* (vēf). Lively, brisk.
Vigorosaménte, *It.* (vē-gō-rō-zä-*mān*-tĕ). With energy, vigor.
Vigoróso, *It.* (vē-go-*rō*-zo). Energetic, vigorous.
Villareccio, *It.* (vēl-lär-*rĕt*-shō). Rural, rustic.
Violentaménte, *It.* (vē-ō-lĕn-tä-*mān*-tĕ). Impetuously, violently.
Violénto, *It.* (vē-ō-*lān*-tō). Violent.
Vista, *It.* (*vēs*-tä). Sight.
Vistaménte, *It.* (vēs-tä-*mān*-tĕ). Animatedly.
Visto, *It.* (*vēs*-tō). Lively, animated.
Vite, *Fr.* (vēt). Quick.
Vivácе, *It.* (vē-*vä*-chĕ). A tempo mark denoting a degree of speed equalling or exceeding allegro.

Vivacíssimo, *It.* (vē-vä-*chēs*-sē-mō). Very fast.
Vive, *Fr.* (vēv). See Vif.
Vivénte, *It.* (vē-*vān*-tĕ). Animated, lively.
Vívido, *It.* (*vē*-vē-dō). } Spirited, lively.
Vívo, *It.* (*vē*-vō). }
Vóce, *It.* (*vō*-chĕ). Part, voice.
Voilée, *Fr.* (*vwä*-lā). Veiled.
Voix, *Fr.* (vwä). Part, voice.
Vokal, *Ger.* (*fō*-käl). Vocal.
Volánte, *It.* (vō-*lān*-tĕ). Swift, light.
Voláta, *It.* (vō-*lä*-tä). } A short vocal trill or run.
Voláte, *Ger.* (vō-*lä*-tĕ). } A light, rapid series of notes.
Volatíne, *It.* (vō-lä-*tē*-nĕ). }
Volkslied, *Ger.* (*fōlks*-lēd). Folk-song.
Voll, *Ger.* (fōll). Full.
Vólta, *It.* (*vōl*-tä). A turn or time (ending), as prima volta, first time; secondo volta, second time.
Vólti, *It.* (*vōl*-tē). Turn over.
Vólti súbito, *It.* (*vōl*-tē *soo*-bē-tō). Turn over at once.
Volubilménte, *It.* (vō-loo-bēl *mān*-tĕ). Fluently.
Voluntary. A title given to the various organ pieces used to open a church service.
Vom, *Ger.* (fōm). From the.
Vorder satz, *Ger.* (*fōr*-dĕr säts). First subject or theme.
Vorgeiger, *Ger.* (fōr-*ghī*-ghĕr). Leader, first violin.
Vorhalt, *Ger.* (*fōr*-hält). Suspension.
Vorhaltslösung, *Ger.* (*fōr*-hälts *lös*-soongk). Resolution of a suspension.
Vorher, *Ger.* (*fōr*-hĕr). Before, previous.
Vorig, *Ger.* (*fōr*-ĭg). Preceeding, previous.
Voriges Zeitmass, *Ger.* (*fōr*-ĭg's *tsīt*-mäss). Tempo, primo.
Vorschlag, *Ger.* (*fōr*-shläg). A general term for the various kinds of accented appoggiatura.
Vorsetzzeichen, *Ger.* (*fōr*-sĕts-*tsĭk'n*). Chromatic sign.
Vorspiel, *Ger.* (fōr-*shpēl*). Overture, prelude, introduction.
Vortrag, *Ger.* (*fōr*-träg). Style, interpretation.
Vox, *Lat.* (vŏx). Voice.
Vue, *Fr.* (vü). Sight.
Vuóta, *It.* (voo-*ō*-tä). } Open.
Vuoto, *It.* (voo-*ō*-tō). }

Wankend, *Ger.* (*vän*-kĕnd). Hesitating, wavering.
Wärme, *Ger.* (*vār*-mĕ). Warmth (feeling).
Webmuth, *Ger.* (*vāb*-moot). Sadness, melancholy.
Webmüthig, *Ger.* (vāb-*mü*-tĭg). Sad.
Weich, *Ger.* (vīkh). Tender, soft, minor.
Weinend, *Ger.* (*vī*-nĕnd). Weeping.
Weit, *Ger.* (vīt). Broad.
Weltliche lieder, *Ger.* (*vēlt*-lĭkh-ĕ *lē*-dĕr). Secular songs.
Wenig, *Ger.* (*vā*-nĭg). Little.
Wie, *Ger.* (vē). As.
Wie oben, *Ger.* (vē *ō*-bĕn). As.
Wie vorher, *Ger.* (vē *fōr*-hĕr). As at first, as before.
Wie aus der Ferne, *Ger.* (vē ows dĕr *fĕr*-nĕ). As from a distance (echo).
Wieder, *Ger.* (*vē*-dĕr). Again.
Wiedergabe, *Ger.* (*vē*-dĕr-gä-bĕ). Performance, interpretation.
Wiederholung, *Ger.* (*vē*-dĕr-*hō*-loongk). Repetition.
Weiderzeichen, *Ger.* (*vē*-dĕr-*tsī*-kh'n). Repeat.
Wiegenlied, *Ger.* (*vē*-gĕn-lēd). Cradle-song.
Wind-band. The wind instruments of an orchestra.
Wood-wind. The orchestral wind instruments that are made of wood, as the flute, oboe, clarinet, etc.
Wortklang, *Ger.* (*vōrt*-klängh). Accent; tone.
Wuchtig, *Ger.* (*vükk*-tĭg). Weighty; with strong emphasis
Wunderlich, *Ger.* (*voon*-d'r-lĭkh). Odd, capricious.
Würde, *Ger.* (*vür*-dĕ). Dignity.
Wüthend, *Ger.* (*vüt*-ĕnd.) Frantic, furious.

Zart, *Ger.* (tsärt). Delicate, tender.
Zärtlich, *Ger.* (*tsārt*-lĭkh). Tenderly.
Zeffiróso, *It.* (tsĕf-fē-*rō*-zō). Zephyr-like.
Zeichen, *Ger.* (*tsī*-kh'n). A sign.
Zeit, *Ger.* (tsīt). Time. Also the same as taktteil.
Zeitmass, *Ger.* (*tsīt*-mäss). Tempo.
Zeitwerth, *Ger.* (*tsīt*-vârt). Time-value.
Zelosaménte, *It.* (tsā-*lō*-zä-*mān*-tĕ). Enthusiastically.
Zelóso, *It.* (tsā-*lō*-zō). Enthusiastic, ardent.
Ziemlich, *It.* (*tsēm*-lĭkh). Rather, somewhat.
Zierlich, *Ger.* (*tsēr*-lĭkh). Elegant, graceful, delicate.
Zigeunerartig, *Ger.* (*tsē*-goyn-*ār*-tĭg). Gypsy-like.
Zinfónia, *It.* (tsēn-*fō*-nē-ä). A symphony.
Zingarésca, *It.* (tsēn-gä-*rās*-kä). A Gypsy song or dance.
Zingarésca, *It.* (tsēn-gä-*rās*-kä). } Gypsy-like.
Zingarésco, *It.* (tsēn-gā-*rās*-kō). }
Zitternd, *Ger.* (*tsĭt*-tĕrn'd). Tremulous, trembling.
Zittíno, *It.* (tsēt-*tē*-nō). Silence.
Zögernd, *Ger.* (*tsō* ghĕrnd). Retarding, lingering, hesitating.
Zóppa, *It.* (*tsōp*-pä). } Halting; syncopated.
Zóppo, *It.* (*tsōp*-pō). }
Zunehmend, *Ger.* (tsoo-*nā*-mĕnd). Crescendo.
Zurückhalten, *Ger.* (tsoo-*rük*-*häl*-t'n). To retard.
Zurückhaltend, *Ger.* (tsoo-*rük*-*häl*-tĕnd). Ritardando.
Zurückhaltung, *Ger.* (tsoo-*rük*-*häl*-toongk). Retardation.
Zwei, *Ger.* (tsvī). Two.
Zweihändig, *Ger.* (*tsvī*-hän-dĭg). Two hands.
Zweistimmíg, *Ger.* (*tsvī*-shtĭm-mĭg). For two parts, or voices.
Zwischen, *Ger.* (*tsvĭsh*-ĕn). Intermediate, between.
Zwischenspiel, *Ger.* (*tsvĭsh*-ĕn-shpēl). Interlude, intermezzo.
Zwischen-stille, *Ger.* (*tsvĭsh*-ēn-*shtĭl*-lĕ). A pause.

PRONUNCIATION OF THE NAMES OF THE CHIEF COMPOSERS AND ARTISTS

Auber (Oh-bare′).
Adam (Ah′-dahm).

Boïto (Boy-ee′-toe).
Bargiel (Bahr′-geel).
Bülow (Bee′low).
Bach (Bahch).
Beethoven (Bay′-toven).
Bellini (Bellee′nee; final syllable short).
Berlioz (Bair′-lee-oz).
Bizet (Bee′zay).
Brahms (Brahms; broad "ah").
Bruch (Brooch; hard "ch," guttural).

Calve (Kahl′-veh).
Chaminade (Shah′-mee-nahd).
Cherubini (Kair-oo-bee′-nee; final short).
Chopin (Sho′-pang).
Clementi (Kleh-ment′-ee; final syllable short).
Couperin (Koop′-er-rang).
Cramer (Krah′-mer).
Cui (Koo′-ee).
Czerny (Churn′-y).

D'Albert (Dahl′bear).
Delibes (Day-leeb′).
De Reszke (Deh-Resch′-keh).
Diabelli (Dee-ah-bel′-lee).
Donizetti (Doh-nee-tset′-tee).
Dvořák (Dvor-zhak).

Faure (For).
Flotow (Floh′-to).
Franchetti (Frahn-ket′-tee; final short).
Frank (Frahnk).
Franz (Frahnz).
Fuchs (Fooks).

Gade (Gah′-deh).
Glazounow (Glah-tsõo′-noff).
Gluck (Gloock).
Godard (Go′-dar).
Gounod (Goo′-no).
Grieg (Greeg).
Guilmant (Geel′-mong).

Halevy (Hah-lay′-vy).
Händel (Hand′-el).
Haydn (High′-dn).
Herold (Hair′-old).

Jensen (Yen′-sen).

Kjerulf (Kcher′-oolf; guttural "ch").

Lachner (Lahch-ner; guttural "ch").
Leoncavallo (Lay′-on-kah-vah′-lo).
Liszt (Least).
Loewe (Lay′-ve).

Mascagni (Mahs-cahn′-yee).
Massenet (Mahs′-say-nay).
Mattei (Mah-tay′-ee).
Mendelssohn (Mend′-l-sohn).
Meyerbeer (My′-er-bare).
Moscheles (Mosh′-eh-les).
Moszkowski (Mosh-koffs′-kee).
Mozart (Mo′-tsart).
Napravnik (Nah-prahv′-nick).
Nicodé (Nick′-oh-day).
Offenbach (Of′-fen-bach; guttural "ch").
Ouseley (Ooze′-ley).

Paderewski (Pah-der-eff′-skie).
Palestrina (Pah-les-tree′-na).
Pergolesi (Pair-go-lay′-zy).
Puccini (Poo-cheen′-ie).

Raff (Rahff).
Rameau (Rah′-mo′).
Reinecke (Rye′-neck-eh).
Rheinberger (Rine′-bair-ger).
Rossini (Ros-see′-nee).
Rubinstein (Roo′-bin-stine).

Saint-Saëns (Sane-sahng) impossible to give quite correctly; last syllable somewhat nasal.
Scharwenka (Shar-venk′-er).
Schytte (Shee′-tay).
Scarlatti (Scahr-laht′-tee; last short).
Schubert (Shoo′-bairt; the "t" very light).
Schumann (Shoo′-mahnn).
Sgambati (Sgahm-bah′-tee; last short).

Tschaikowsky (Tschy-koff′-skee).

Verdi (Vair′-dee).
Volkmann (Folk′-mahnn).

Wagner (Vahg′-ner).
Weber (Vay′-ber).
Widor (Vee′-dor).

ABBREVIATIONS

A. Alto.
Accel. / **Accel°.** } Accelerando.
Acc. / **Accom.** / **Accomp.** } Accompaniment.
Accres. Accrescendo.
Adg°. or Ad°. Adagio.
Ad lib. Ad libitum.
Affett. Affettuoso.
Affrett. Affrettando.
Ag°. or Agit°. Agitato.
All°. Allegro.
Allgtt°. / **Alltt°.** } Allegretto.
All'ott. / **All'8va.** } All'ottava.
Al seg. Al segno.
And^no. Andantino.
And^te. Andante.
Anim°. Animato.
Arc. Coll'arco, or Arcato.
Ard. Ardito.
Arp°. Arpeggio.
A t. / **A tem.** / **A temp.** } A tempo.
Aug. / **Aug^n.** } Augmented, By augmentation.

B. Basso, bass.
Bar. Baritone.
B. C. Basso continuo.
B. G. Basso generale, or Bassus generaiis.
Bl. Blasinstrumente.
Br. Bratschen.
Brill. Brillante.

C. $\frac{4}{4}$ time.
¢. Alla Breve time; also Semi Breve or double time.
C. a. Coll'arco.
Cad. Cadenza.
Cal. Calando.
Calm. Calmato.
Cant. Canto.
Cantab. Cantabile.
C. b. Contrabasso.
C. B. Col basso.
Cb. Contrabässe.
C. D. Colla destra.
'Cello. Violoncello.
Cemb. Cembalo.
C. F. Canto fermo.
Ch. Choir, choir-organ.
Chal. Chalumean.
Chor. Chorus.
C. I°. Canto primo.
C. L. Col legno
Clar. Clarinet.
Clar°. Clarino.
Clar^tto. Clarinetto.
Co. Come.
Col c. Col canto.
Coll'ott. / **C. 8va.** } Coll' ottava.
Com. Comodo.
Con espr. Con espressione.
Cor. Cornet or Corno.
Co. So. Come sopra.
C. P. Colla parte.
Cres. / **Cresc.** } Crescendo.
C. S. Colla sinistra; also come sopra.
C^to. Concerto.
C. voc. Colla voce.

Dal. S. Dal segno.
D. C. Da capo.
Decresc. Decrescendo.
Delic. Delicamente.
Dest. Destra.
Diap. Diapason, or Diapasons.
Dim. Diminuendo, diminution.
Div. Divisi.
Dol. Dolce.
Dolcis. Dolcissimo.
Dopp. Ped. Doppio pedale.

Energ. Energicamente.
Espr., or Espress. Espressivo.
Exp., or Expr. Orgue expressif.

f. or for. Forte.
Fag. Fagotto.
Falset. Falsetto.
ff. or fff. Fortissimo.
Fl. Flauto.
Flag. Flageolet.

F. O. / **F. Org.** } Full organ.
fp. Forte piano.
Fz. or Forz. Forzando.

Ged. Gedämpft.
G. O. / **G. Org.** } Great organ. Grand orgue.
Grand. Grandioso.
Graz. Grazioso.
Gt. Great organ.

Hauptw. Hauptwerk (Great organ).
Haut. Hautboy.
H. C. Haute-contre (high tenor).
Hlzbl. or Hzbl. Holzbläser.
Hptw. or H. W. Hauptwerk.
Hr. or Hrn. Hörner.

Incalz. Incalzando.
Intro. Introduction.
Inv. Inversion.

K. F. Kleine Flöte.

Leg. Legato.
Legg. Leggero, Leggiero.
L. H. Left hand, linke hand.
Lo. Loco.
Luo. Luogo.
Lusing. Lusingando.

Maestº. Maestoso.
Magg. Maggiore.
Man. Manual.
Manc. Mancando.
Marc. Marcato.
M. D. Mano destra, or main droite.
Men. Meno.
Met. Metronome.
Mez. Mezzo.
Mf. Mezzo forte.
Mfz. Mezzo forzando.
M. G. Main gauche.
M. M. Maelzel's metronome.
Mod., Modtº. Moderato.
Mor. Morendo.
Mp. Mezzo piano.
M. S. Manuscript, Manosinistra.
M. V. Mezza voce.

Ob. Oboe.
Obbl. Obbligato.
Oberst. Oberstimme.
Oberw. or Obw. Oberwerk.
Oh. Ped. Ohne Pedal.
O. M. Obermanual.
Op. Opus.
Opp. Oppure.
Orch. Orchester, orchestra.
Org. Organ.
Ott, Ova, 8a or 8va. Ottava.
O. W. Oberwerk.

Ped. Pedal.
Perd. Perdendosi.
pf. più forte.
P. F. / **Pfte.** } Pianoforte.
Piang. Piangendo.
Pianiss. Pianissimo.
Pizz. Pizzicato.
pmo., pp., ppp., pppp. Pianissimo.
Prin. Principal.

Raddol. Raddolcendo.
Rall. Rallentando.
Recit. Recitative.
ri., rfz., rinf., rinfz. Rinforzando.
R. H. Right hand, rechte hand.
Rilas. Rilasciando.
Rip. Ripieno.
Risol. Risoluto.
Ritard. Ritardando.
Rit., Riten. Ritenuto.

Salic. Salicional.
Scherz. Scherzando.
Seg. Segue.
Sem. or Semp. Sempre.
Sf., sfz., sff. Sforzando.
Sim. Simile.
Sin. Sinister.
Sinf. Sinfonia.
S. int. Senza interruzione.
Slent. Slentando.
Smorz. Smorzando.
Sos., Sost. Sostenuto.
Sp. Spitze.
S. P. Senza pedale.
Spir. Spirituoso.
S. S. or Sord. Senza sordini.
S. T. Senza tempo.
Stacc. Staccato.
St. D. or St. Diap. Stopped diapason.
Stent. Stentando.
Str. } String insruments. Streichinstrumente.
String. Stringuendo.
Sw. Swell-organ.
Sym. Symphony.

T. C. Tre corde.
Temp. Tempo.
Tempo I. Tempo primo.
Ten. Tenuto.
Timp. / **Tp.** } Timpani.
T. P. Tempo primo.
Tr. Trill, trumpet.
Tratt. Trattenuto.
Trem. Tremolando, Tremulant.
Tromb, Trombe. Tromboni.
Tromp. Trompete.
T. S. Tasto solo.

U. C. Una corda.
Unis. Unisono.

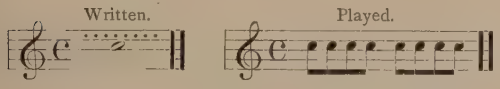
Va. Viola.
Var. Variation.
Vc., Vello, Vllo. Violoncello.
Viol., Vl., Vno. Violino.
Viv. Vivace.
V. S. Volti Subito.
Vv., Vin. Violini.

ABBREVIATIONS BY NUMBERS AND WORDS.

A 2. Both instruments rendering the same part in unison.
1o. First voice or instrument.
11o. Second voice or instrument.
1ma Prima.
1mo Primo.
11da C. Seconda Corda.
111za C. Terza Corda.
IVta C. Quarta Corda.
4to. Quartetto.
5to. Quintetto.
6tto. Sestetto.
7tto. Septetto.

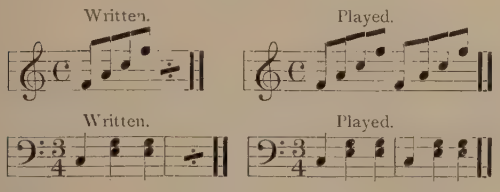
SIGNS.

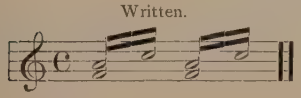
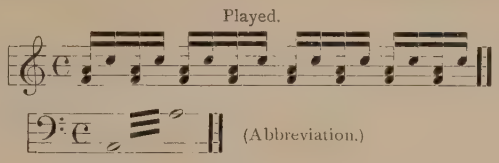
. Dot. Staccato. No longer used as a sign of sforzato.
Staccatissimo. Martellato.
Forte tenuto. Marcato.
Mezzo staccato. Portamento.

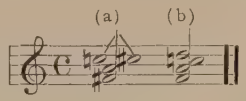


Two or more dots placed above a note, in violin music, indicates the number of notes of equal time-value into which the given note is to be divided.

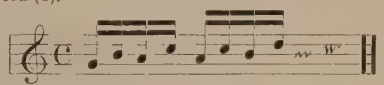
Mezzo legato.
Sign used in vocal music denoting that the notes under which the sign is placed are to be sung to one syllable.
Hold.
Repeat the chord or figure (Abbreviation).



, , or Breve, or Double note; time-value equal to two whole notes.

A form of tremolo in which the lower note alternates with the upper note as rapidly as possible, the tremolo having the time-value of one whole note.

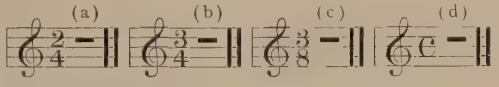


The four notes at (a) are played in the same manner as the chord (b).

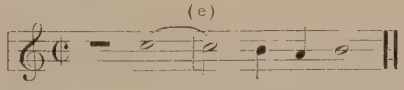


(Abbreviation.) Direct. Continue the figure.

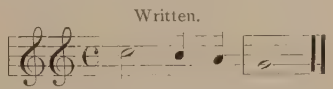
— Commonly called "whole rest," which is, however, rather misleading, inasmuch as the sign indicates one of two meanings, — either the whole measure is silent, or a part of the measure equal in time-value to a whole note is silent.



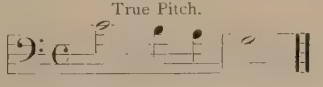
The "whole rest" at (a) (b) (c) and (d) indicates that the whole measure is silent.

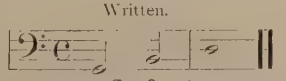


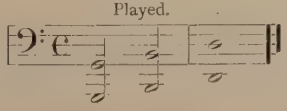
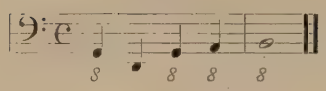
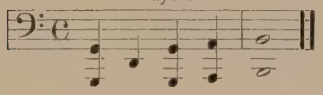
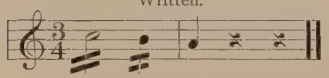
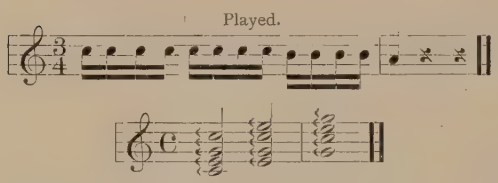
Example (e) is a quotation from the Missa Papæ Marcelli by Palestrina; it is in Alla Breve time. The rest in the first measure has the time-value of a whole note.

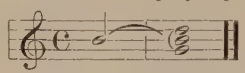


The double G clef, used in some choral works for the tenor part; it denotes that the part is to be sung an octave lower than written.

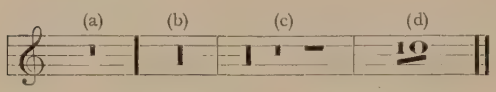




Con 8va bassa.

Written.

Played.

Written.

Played.

Broken chords; beginning with the lowest note, the remainder follow in succsssion as rapidly as possible.



The g and d in the second measure are played like a broken chord; the b is held over from the first measure (Pianoforte music).



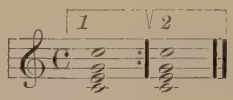
(a) Two measures rest; (b) four measures rest; (c) seven measures rest; (d) ten measures rest, or more, according to the number given.

Stopped notes for the horn.

𝄋, 𝄋, 𝄋, 𝄋, §. See Segno.

(a) 𝆔, (b) 𝆕, (c) 𝆖, (d), tremu (e) 𝆓, (f) (𝆓.

(a) Inverted mordent; (b) mordent; (c) turn; (d), (e), (f), trill.



First ending; second ending.

> or < Rinforzando. ∧∨> Sforzato.

┌─┘ or Ped. └─┐ Modern signs for using the damper (loud) pedal of the pianoforte.

Crescendo. Decrescendo.

TERMS AND ABBREVIATIONS IN SONATAS.

Anhang (*Ger.*) Coda. (Abbr. Anh.)
Durchführungssatz (*Ger.*) Development. (Abbr. DS.)
Hauptsatz (*Ger.*) Principal theme. (Abbr. HS.)
Mittelsatz (*Ger.*) Middle theme. (Abbr. MS.)
Rückgang (*Ger.*) Returning passage. (Abbr. Rg.)
Schluss-satz (*Ger.*) Close (Cadence). (Abbr. Schls.)
Seitensatz (*Ger.*) Secondary theme. (Abbr. SS.)
Uebergang (*Ger.*) Transition. (Abbr. Ug.)
Zwischensatz (*Ger.*) Intermediate theme. (Abbr. Zws.)

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